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ABSTRACT

This four-part publication contains 19 papers on educational practices and promises for post-16 education in European countries. Part I, the introduction, contains these three papers: "Sharpening Post-16 Education Strategies: Building on the Results of the Previous Projects" (Johanna Lasonen); "'Parity of Esteem' and 'Integrated Learning'--Reflections on the Work of the Two Research Partnerships" (Pekka Kamarainen); and "European Dimension of Surveys and Analyses of Vocational Education and Training; Brief Remarks on Action Research and Evaluation Research from the Perspective of the European Dimension" (Gerald Heidegger). Part II, New Partners' Country Reports: National Reforms in Upper Secondary Education, contains these six country reports: "National Report on Belgium" (Donatienne Colson and Xavier Roegiers); "Reforms in Upper Secondary Education in Denmark" (Soren Nielsen and Steffen Svendsen); "Estonian Educational System: An Overview and the Estonian Approach to Upper Secondary Education" (Hanno Isok); "Reforms in Upper Secondary Education in Greece" (Nikitas Patiniotis and Catherine Spiliopoulou); "Interim Report of the SPES-NET [Sharpening Post-16 Education Strategies by Horizontal and Vertical Networking] Project from Hungary" (Csaba Fejos); and "Reforms in Post-16 Education in Spain and Parity of Esteem in Upper Secondary Education" (Fernando Marhuenda). The following nine

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papers make up Part III, Old Partners' Contribution to the Project: "'Eastern Reforms' and Their Impact on 'Western Approaches'" (Stefan Humpl and Jorg Markowitsch); "Comments on the Spanish Reforms and Lessons from Them for the Development of Upper Secondary Education in Europe" (Michael Young); "Comments on 'Reforms in Upper Secondary Education in Denmark--A Country Report'" (Kjell Andersen); "On-the-Job Training--A New Development Project in Finnish Vocational Education" (Ulla Numminen); "Links between Educational Establishments and Business Enterprises in Norway" (Kjell Andersen); "Overview of College-Enterprise Links" (Stuart Niven, Gordon Paterson); "SPES-NET Austria: Preliminary Plan" (Stefan Humpl and Jorg Markowitsch); "SPES-NET Finland: Dissemination Plan" (Ulla Numminen); and "Plan for a National Network in France" (Anne Lazar). Part IV, the conclusion, is the following paper: "Reflections on Disseminating Strategies for Reforming Post-16 Strategies" (Marja-Leena Stenstrom). Three appendixes include a list of contributors, contact information, and locations of partner institutions. (KC)

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TYÖPAPEREITA
WORKING PAPERS

Working Papers n° 9

Reflections on Post-16 Strategies in European Countries

Editor
Marja-Leena Stenström

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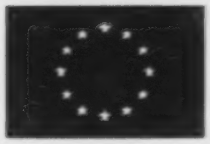

Interim Report of the Leonardo da Vinci/Multiplier Effect Project III.3.a. Priority 2: Forging links between educational establishments and enterprises (1997-2000) ID 27009

Working Papers n° 9

Reflections on Post-16 Strategies in European Countries

Editor
Marja-Leena Stenström

Sharpening Post-16 Education Strategies by Horizontal and Vertical Networking

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Preface

This interim report, *Reflections on Post-16 Strategies in European Countries* is one result of the first year's work of the Leonardo project SPES-NET (Sharpening Post-16 Education Strategies by Horizontal and Vertical Networking), the dissemination project of the earlier Post-16 Strategies project carried out in 1996 - 1997 under the coordinatorship of Dr Johanna Lasonen. The SPES-NET project belongs to the multiplier-effect projects of the Leonardo da Vinci programme and is related to Priority 2: Forging closer links between educational or training establishments and enterprises.

The SPES-NET project will run for 28 months between 8 December 1997 and 7 April 2000. The project is supported by the Commission of the European Communities under the Leonardo da Vinci programme, by the Finnish Ministry of Education, and by the project partners. The contractor of the project is the University of Jyväskylä, Finland, its coordinating unit the Institute for Educational Research. Between 8 December 1997 and 28 February 1998 its coordinator was Dr Johanna Lasonen, who originally launched the project, followed by Dr Marja-Leena Stenström from 1 March 1998.

The partnership consists of 14 European institutions representing universities, research centres and educational administrative bodies. There are 6 new partners; the extension of the partnership involves mainly the eastern and southern parts of Europe. The partners are as follows: *Austria:* Industriewissenschaftliches Institut (IWI), Jörg Markowitsch/Stefan Humpl; *Belgium*: Bureau d'Ingénierie en Éducation et en Formation (BIEF), Xavier Roegiers/Donatienne Colson; *Denmark*: Danish Institute for Educational Training of Vocational Teachers, Søren Nielsen; *England:* Post-16 Education Centre, Michael Young; *Estonia*: National Examination and Qualification Centre (NEQC), Andres Adamson/Hanno Isok; *Finland*: National Board of Education, Ulla Numminen; *France*: Institut National de la Recherche Pédagogique (INRP), Anne Lazar; *Germany:* Berufsbildungsinstitut Arbeit und Technik (BIAT), Gerald Heidegger, and Institut Technik und Bildnung (ITB), Rainer Bremer; *Greece*: University of Patras, Nikitas Patiniotis/Catherine Spiliopoulou; *Hungary:* Technical University of Budapest, Csaba Fejös; *Norway*: Agder College, Ivar Njerve/Kjell Andersen; *Scotland:* Clydebank College, Stuart Niven; *Spain*: Universitat de València, Fernando Marhuenda.

The aim of the SPES-NET project is to disseminate, on both the national and the international level, the results of the Post-16 Strategies project. In the first stage the new partner countries have familiarised themselves with the developmental strategies of the old partners and analyse vocational education and training in their own countries against those strategies. The old partner countries have advised the new countries joining the project and monitor the progress and implementation of the reforms on the national level. After completing this stage the project has gone on to disseminate information about developmental strategies on the national and international level by means of working groups, the Internet and various publications, and analyse national- and international-level links between education and working life. In the final seminar the participating countries will assess the success and results of the multiplier-effect project. The results will then be collected in a final report.

The suggestion to publish an interim report was made in the Jyväskylä workshop of the project, held 6-10 June 1998, which was the first meeting of the partnership as well

as a joint seminar with the other Leonardo project DUOQUAL, coordinated by Dr Sabine Manning from the WIFO, Germany. The articles published in the interim report are based on the presentations given in the Jyväskylä workshop. Their main purpose has been to disseminate and develop the post-16 education strategies adopted in different European countries. The new partners were asked to analyse their country reports on the basis of "Criteria for Mapping National Strategies" (Lasonen & Young, (Eds.) 1998, pp. 201-203). The old partners were asked to comment on the new partners' country reports. The idea was to thus start the collaboration between the new and old partners.

The book is divided into four parts. The first part is an introduction, in which Dr Johanna Lasonen has written the first chapter. Project Director Pekka Kämäräinen from the CEDEFOP, the monitor of both the Post-16 Education Strategies and the SPES-NET projects, and Professor Gerald Heidegger gave presentations in the Jyväskylä workshop. These presentations are included in the introduction. The next two parts present the partners' contribution to this publication. Their articles have been arranged under four themes: 1) each of the new partners has drawn up a country report on their post-16 education system and its reforms; 2) the old partners have given their comments on what they have learned from the new partners' country reports regarding post-16 education strategies; 3) some of the partners have described their dissemination activities under the theme of forging links between educational establishments and enterprises; 4) some partners who have concentrated on dissemination activities report on their plans and experiences. Finally, project coordinator Marja-Leena Stenström has written a conclusion.

The SPES-NET project has an advisory committee comprising the following persons from the Institute for Educational Research: Director Jouni Välijärvi (Chair), Dr Erkki Kangasniemi, Dr Johanna Lasonen, Dr Raimo Mäkinen, Dr Marja-Leena Stenström, Senior Researcher Matti Vesa Volanen and Mrs Sirkku Hihnala (secretary). Mrs Marja-Liisa Mustonen and Ms Marjo-Riitta Liimatainen as well as Ms Seija Mannila have also participated in the work of the project. Mrs Marja-Liisa Mustonen has processed the manuscript for publication. Mr Hannu Hiilos expertly checked its language.

I would like to thank all the partners and authors, the advisory committee, especially Dr Johanna Lasonen who wrote the application for and launched the SPES-NET project, and all the people taking part in the SPES-NET project who have contributed to the process of publishing this report.

Marja-Leena Stenstrom, Coordinator
March 1999

PART I

INTRODUCTION

Sharpening Post-16 Education Strategies: Building on the Results of the Previous Projects

Johanna Lasonen
Institute for Educational Research
University of Jyväskylä

The SPES-NET project was preceded by a Leonardo da Vinci Surveys and Analyses project whose implementation involved an endeavour to exploit the experiences gathered in the work of an international team and to promote shared learning about different educational systems and about the educational reforms carried out in them. The SPES-NET project concentrates particularly on exploiting and reassessing the results of the previous project in new contexts. Participants discuss the educational contexts and results of the Post-16 Strategies project in two ways. On the one hand, in the new partner countries reform strategies of and developmental trends in secondary education are considered at a macro level. On the other hand, are reform strategies brought into a sharper focus and examined in greater detail by taking a look at the forms of cooperation between schools and enterprises.

The chapter will first reflect on what the concepts of dissemination and utilisation of research results mean from the perspective of shared learning, going on to provide a brief description of the completed Survey and Analysis project and of the ongoing multiplier-effect project. The partnership of the project has also engaged in purposeful collaboration with a similar European project, also described here together along with visions of collaboration to achieve added value. The chapter gives space particularly to cooperation between schools and enterprises and to the on-the-job learning that it has made possible. On the one hand this particular subject field represents the SPES-NET project's priority area and on the other hand it emerged, as a result of the earlier project, as one of the foci of developing secondary education. The chapter concludes with a discussion of the challenges that the project is facing in its future work.

Transition From the Root Project to the Multiplier-Effect Project: From the Post-16 Strategies to the SPES-NET

Surveys and Analyses projects carried out under the Leonardo da Vinci action programme on vocational training have contributed to the development of European vocational education by means of exchange of information between countries, thus promoting the mutual intelligibility of vocational education and training systems. As regards individual projects, the following questions have been found crucial in the context of mutual (or, in optimal cases, truly shared) learning from experiences gained in different societal contexts:

- How should a multinational team be organised?
- Which phenomena and research subjects are relevant to all the parties making up such a team?
- What is the social and European significance of the given research and development subjects?

- What kind of results will have an impact on the development of vocational education in Europe?
- How are the experiences gained, innovations generated and results produced during a project of this kind best exploited?

The assumption behind today's demand for multinational research teams is probably that in them knowledge of the phenomena of vocational education in Europe emerges in social interaction in a manner that does not bring into play the goal of harmonisation.

The work of cross-national projects of this kind must have a strong social dimension to ensure that team members will learn to understand the ways in which each of them thinks and expresses his or her ideas.

Making use of research-based knowledge is never a straightforward process that depends only on the simple choice of strategy or on the value of the knowledge available for use. Every successful attempt to exploit knowledge depends on additional frames of reference, such as on the involved parties' knowledge of the relevant problem complexes, on the quantity and quality of the knowledge acquired and on the ability and willingness of the individuals involved to use it. Some of these points are linked with the purposes and problems of the chosen evaluation model, while some are connected with the cultural background and view of life of the decision-maker applying the knowledge.

In a multinational research project and development, interaction promotes mutual understanding. In projects whose aim is to look for a shared solution or shared solutions among a number of alternatives, the final decision is made only after many filtering phases.

The traditional model of disseminating and utilising knowledge (R-D-D: research-development-dissemination) has been insufficient to bridge the gap between the producers and the users of knowledge because no attention has been paid to the relationships between systems of knowledge production, contexts of knowledge, utilization, and contextual patterns of knowledge transfer. Even valid research findings will fail to influence practice if those responsible for carrying them out are unable to draw conclusions or if they are unwilling to actually implement them. Functional and relevant links between researchers and practitioners will help representatives of each group understand each other's needs. Researchers need to understand practitioners communication systems and contexts. Practitioners need to learn to appreciate the preconditions for the successful application of research findings.

The Surveys and Analyses project Post-16 Strategies aimed at producing new knowledge about European upper secondary level education strategies assumed to enhance esteem for vocational education. The researchers from Austria, England, Finland, France, Germany, Norway, Scotland and Sweden active in the project functioned in the traditional role of producers of knowledge. Some gaps between producers and users of knowledge were broken down by including some representatives of both groups in the project team. Inviting the active participation of an appropriate number of representatives of target groups other than researchers ensured a more effective dialogue. Practitioners have also contributed to the production of new developmental knowledge. The dissemination project that followed the Post-16 Strategies project, the SPES-NET, has further reinforced the cooperative links and interaction between researchers and practitioners.

The SPES-NET project was designed to disseminate the findings published in the interim report of the Post-16 Strategies project (Lasonen, 1996), comprising chiefly the four post-16 education strategies identified by the earlier project and the school reform schemes linked with them. However, the further elaboration of the upper secondary education reforms compared by the partnership (published in Lasonen & Young, 1998) has shown enriching differences and commonalities between and within the previously defined post-16 strategies and reform trends.

The Main Results of the Post-16 Strategies Project

The prehistory of the Post-16 Strategies partnership goes back to 1992. At that time the Finnish experimental reform of upper secondary education, including initial VET, began to take shape. The foundations of common research activities had been laid in joint international seminars and an international evaluation of Finnish reforms. Some of the key institutions of the partnership had already developed a tradition of regular interaction. The Finnish National Board of Education and the Institute for Educational Research at the University of Jyväskylä prepared the proposal of the Post-16 Strategies project and submitted it under the evaluation of the National Coordinating Unit and the Commission. The Institute for Educational Research in Finland coordinated and Dr Johanna Lasonen managed the project. Pekka Kämäräinen from CEDEFOP has contributed to the European and Finnish debates on upper secondary education reforms, and later actively monitored the Post-16 Strategies project. During the preparatory phase Kämäräinen (1996) mediated the contacts between two parallel Surveys and Analyses project (Post-16 Strategies and INTEQUAL) proposals and prepared a framework for relating them to each other (see Brown & Manning, 1998).

The project was originally designed as a research and development project. The initial plan put an equal emphasis on creating networks among researchers studying strategies for parity of esteem between general and vocational education, and among practitioners involved in the actual implementation processes and/or in model/pilot schemes. Due to budget cuts the project was reshaped as a primarily research-oriented partnership with a reduced component of practitioner involvement, this was manifested as study visits between pilot schools in the partner countries.

The partner teams identified four alternative strategies for promoting parity of esteem as tools for analysing the differences and similarities between the reform approaches adopted in the eight countries (Raffe, 1996): vocational enhancement, mutual enrichment, linkages, and unification, representing different systemic starting points, varying scope for innovatory activities and a diverse range of curriculum vehicles. The potential that the strategies have for improving esteem for vocational education is based on structural and curricular changes in upper secondary education, the internal development of vocational education through learning, and the development of existing general and vocational qualifications. The strategy of *vocational enhancement* starts from the assumption that by developing teaching and learning it is possible to give students the qualifications to engage in tertiary-level further studies, traditionally thought to be possible to acquire only in general upper secondary education. Esteem for vocational education is linked with the standard of the content offered and pedagogy applied in vocational education and training. The German and

Austrian reforms are grounded on the assumption that vocational training can also open students a path to higher education qualifications. Under the strategy of *mutual enrichment* represented by the Norwegian and Finnish reforms, vocational education institutions, enterprises and general upper secondary schools cooperate with the aim of giving students a wider range of options and more stimulating learning environments. Different types of school on one hand and school and work on the other hand are brought together while still preserving their distinctive character. The *linkages* strategy, adopted in England and France, involves making vocational and general education formally equal by linking both to a common qualification structure. These three strategies aim to maintain a separate identity for vocational and general education. Under the strategy of *unification*, by contrast, vocational and general education have merged to the degree of making up a uniform upper secondary level educational system.

The project partners worked in two-country teams and described and compared the aims, objectives and rationale of each strategy. The strategy reports provided the basis for cross-strategy analyses comprising conceptual and practical conclusions from the comparisons. Each national team also prepared a commentary on each of the other strategies, raising questions about the given strategy and identifying lessons for each team's own country.

Each country's reform programme might include elements of different strategies, and the emphasis of a country's policy might change over time. The analyses confirmed the value of the concept of strategies, but suggested that the particular typology of strategies might have needed to be revised and or to be extended. A possibility is to view the four strategies as representing a continuum between strategies based on the distinctiveness of academic and vocational education on the one hand and those based on their full integration on the other, with linkages and mutual enrichment as intermediate strategies between the two poles. This continuum can be described for several different dimensions of change (such as curriculum, certification, institutions) and a country's strategy can vary across these dimensions. The other possible conceptualisation proposed was judging the eight national reform strategies on a continuum from *insularity* to *connectivity* consisting of nine *reform trends*.

These trends were found to varying degrees in each country. They were grouped as subdimensions of the four dimensions of connectivity (context, content, structure and process), ranging from new relationships between educational providers and enterprises and new approaches to teaching, learning and content to making the system more inclusive and flexible and undertaking bottom-up reforms involving the relationships between schools and colleges and between educational establishments and enterprises (Young & Volanen, 1998). Figure 1 illustrates this way of conceptualising European

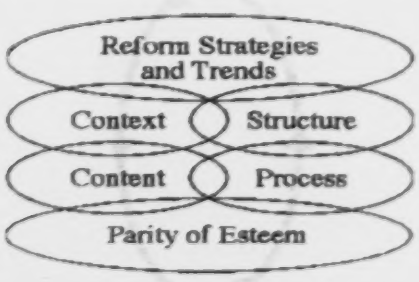

Figure 1. *Factors Promoting Parity of Esteem in Upper Secondary Education.*

Together these trends represented an overall strategy of creating more connective systems within upper secondary education that are more capable of acting on their environment rather than just adapting to it.

The Post-16 Strategies project has pinpointed many *practical lessons* which countries can learn from experiences gained elsewhere, but these tend to be specific to the country which is learning it. Thus the findings need to be communicated to policy and practitioner audiences at the national level, as well as at EU level. No one strategy was found to be superior to or more effective than the others in an absolute sense; the effects of each strategy must be judged in relation to the educational system and the context in which it was introduced. The study visits made as part of the project created *learning links* between the schools involved in the reforms. It was found that a country may learn most from other countries pursuing the same strategy, but it may also learn from other countries. In general, most areas where the parties felt that they had lessons to learn from the others involved flaws in their own reform, strategy or educational system. One of the most important practical lessons from the comparisons was better understanding of one's own country, and of the strategy it is pursuing.

Collaboration Between Two Surveys and Analyses Projects: Post-16 Strategies and INTEQUAL

Exploiting and disseminating information are related functions because the results of dissemination can contribute to the utilisation of the information being disseminated. In the case of the Post-16 Strategies and INTEQUAL projects, information dissemination was seen one of the functions of the Surveys and Analyses projects (Lasonen 1998; Manning, 1997). Thus occasions where information was disseminated through interaction with different target groups provided the Post-16 Strategies project with feedback that could be exploited during the collaborative process. On the basis of the various target groups we may distinguish the following applications of the results of the Post-16 Strategies project:

- *Instrumental exploitation:* the research process and its results were directly applied to particular problems. Policymakers emerged as the particular target group of this type of application. Researchers advised policymakers and policymakers drew upon the European results in evaluating national reform projects. Essential about this approach is its action orientation, that is, its aim of chiefly solving practical problems. However, no feedback was received on how well-defined the practical problems addressed were, or who had defined them.
- *Conceptual exploitation:* the information generated by the project was used to gain an understanding of a problem and, in this way, to influence the way in which national educational plans and curriculum decisions were made. For example, school administrators developed and created new programmes based on the outcomes of the shared learning that took place in the project.
- *Political exploitation:* the strategies for reforming upper secondary education were used for the purposes of defining, revising and implementing educational policies. This approach was made more complex by the values it brought into play.

It may be assumed that the sponsor's objective has been to use the results of Surveys and Analyses projects to solve specific problems shared by a number of European countries (e.g. disparity of esteem between vocational and general education). Researchers are probably particularly interested in another aspect, the conceptual exploitation of the results. Utilising research results for the purposes of political decisions and their implementation is much more difficult at the European than at the national level.

The goals and procedures of the Post-16 Strategies and INTEQUAL projects have been complementary. While the Post-16 Strategies project aimed at an aggregative and overarching framework for describing educational reforms by surveying and comparing European post-16 education reform strategies, the INTEQUAL project focused on an in-depth study of qualifications with dual orientation, giving students access both to working life and to further studies, and on curriculum development. Its aim has been transferring qualitative innovations achieved in such schemes into mainstream vocational education and across national systems.

The intention of collaboration between the two projects was articulated in the projects' proposal phase by Pekka Kämäräinen from the CEDEFOP, who pointed out that both projects were fundamentally concerned with parity of esteem, presenting a systemic review of the concept and its place in European educational systems. This analytic overview considered various manifestations of parity of esteem (Kämäräinen, 1996). The targeted monitoring of European cooperation projects by the CEDEFOP has also helped to disseminate the results of the Post-16 Strategies project to other partnership constellations.

Collaboration between the two European Leonardo projects, the Post-16 Strategies and the INTEQUAL, took place during the course of two years. The collaborative action plan drawn up in 1996 defined the following aims:

- organising professional forums for mutual dissemination of the results of the two projects;
- describing typical ways of exploiting the results across the projects;
- considering a new project proposal for transferring the results among practitioners;
- finding alternatives within the surveys and analysis methodology; and
- defining a dimension on which the projects' results could be reviewed in Southern European countries.

Several international conferences made possible a reciprocal dissemination of the findings of the two projects and allowed their participants to comment on the other project's work. The applications for the multiplier-effect projects based on the results of the Post-16 Strategies and INTEQUAL projects were accepted in 1997. A joint workshop of the SPES-NET and DUOQUAL projects was held in June 1998 in Finland.

There is a difference between the disseminating activities of the Surveys and Analyses projects and of those of multiplier-effect projects. The latter should include an applicative element that allows an examination of the practical implications of the results.

The SPES-NET Project

The purpose, make-up and tasks of the immediate successor to the Post-16 Strategies project, the SPES-NET dissemination project, have been defined on the basis of conceptual cluster comprised of the contexts of the researchers, the practitioners and the decision-makers, and the linkage mechanism connecting them. The basic assumption guiding the implementation of the proposed dissemination project was to ensure long-term impacts by creating sustained interaction and generating intellectual enrichment through multilevel networks. The stronger the links between the researchers and the practitioners, the better the researchers might be able to learn to understand the practitioner's needs and communication systems and the better the practitioners could in their turn learn to understand and value the preconditions for the successful application of research findings and of the results of development work. The SPES-NET project focuses on disseminating post-16 education reform strategies adopted in the old partners' countries by using national networks linking stakeholders from different sectors of education. In addition to national dissemination, the new partners from Eastern and Southern European countries have reviewed the reform strategies and trends identified by the old partners against their national contexts and their experiences in the transnational setting.

The main objective of the SPES-NET project was to focus on linkages between educational and training establishments and enterprises among the old partners' pilot schools intended to create a broader range of learning environments.

The main target groups for the SPES-NET project's anticipated impacts and its dissemination activities are vocational education policy makers, social partners, researchers, teacher educators and pilot school teachers belonging to national and/or transnational networks. Students, hopefully receiving the final impacts of the project through educators, will comprise the ultimate target group.

Collaboration Between Two Multiplier-Effect Projects:SPES-NET and DUOQUAL

The multiplier-effect project DUOQUAL is based on the results of the INTEQUAL project (Manning, 1996; 1997), which investigated innovative upper-secondary-level qualification schemes with a dual orientation towards employment and higher education (Brown & Manning, 1998). The INTEQUAL, comparing such schemes in seven countries, produced results of relevance to the development of VET in Europe, in particular as regards the cohesion of VET policies.

Aiming at a significant multiplier effect, the DUOQUAL will extend its comparative analysis, so far applied to seven qualification schemes in use in Northern and Western Europe, to an additional group of seven countries in Central and Southern Europe. This extension will allow a transfer of previously gained experience and a more differentiated analysis of the diversity of qualification schemes and their complex relation to the national framework of VET. By covering all major regions and types of VET in Europe, the results of the comparative analyses will gain considerable relevance and applicability. As the main outcome of the analyses, a set of national conclusions will be provided as advice to VET policy makers and practitioners.

The purpose of the collaboration between the SPES-NET and the DUOQUAL is to support the objectives of each project, to strengthen national added value and the European dimension, and to find out how the two projects' transnational analyses of qualification schemes on the one hand and of reform strategies on the other could be linked. The projects will collaborate in the context and forum of disseminating the results of European vocational education and training research. The functions of this collaboration may be defined as follows:

- increasing our understanding of the current situation in vocational education and training and in working life from the perspective of society and the individual (e.g. in relation to current policy priorities such as promoting flexibility, transferability, mobility within VET and vehicular designs);
- predicting developmental trends; and
- helping to bring about desirable development in education and working life.

Towards a Pedagogic Interpretation of the Educational Relevance of Work-Based Learning

An aspect of the type of reforms of VET systems discussed by the Post-16 Strategies and INTEQUAL projects and their dissemination projects is a new role gained by schools, colleges and training centres, that of facilitators of local or regional innovations in working life. However, this new role cannot be simply prescribed by national or institutional policy decisions. It is obvious that educational establishments that wish to assume such a role have to be prepared to extend their activities and competencies beyond the accustomed patterns of delivering curricula to their clients. They must be able to position themselves as cooperation partners that can promote learning processes of the kind that are relevant to local and regional initiatives (Lasonen & Kämäräinen, 1998).

If these aims are to be met, the role of educational establishments cannot be limited to finding new clients, whether students and enterprises, for their normal courses or to delivering some additional courses to supply needs expressed by their local or regional clients. Instead, educational establishments are challenged to develop a diverse range of contacts to pinpoint the links between their existing provision, the identified learning needs and the possibilities to exploit the outcomes of learning in local and regional contexts. Moreover, they are also challenged to identify any needs to develop new types of learning provision or adjust the existing ones, to provide support for particular learning gaps and to deliver facilitation services during a follow-up phase after the educational measures have been completed. Thus, educational establishments need to be able to provide

- **didactic** support for the systematisation of the knowledge base of work-based learning;
- **diagnostic** support for identifying the specific learning needs of individual learners and target groups within the context of local or regional cooperation;
- **shaping** support for linking the work-based learning provision to development initiatives in the work organisations that are receiving students.

In order to fulfil such functions, educational establishments must develop a working concept that integrates their support measures for work-based learning with their institutional self-understanding and business idea. For this purpose, a pedagogic interpretation of the educational relevance of work-based learning is needed.

The following sub-sections attempt to indicate how some theoretical approaches to teaching/learning processes or to learning and instruction can provide general coordinates for the positioning of educational establishments, and how more specific concepts and approaches within pedagogic development of VET and CVT can be interpreted as examples of positioning according to the underlying coordinates.

Discussions about the starting points of work-based learning have also involved reflection on the relationship between knowledge and experience. When these two are contrasted, experience represents learning through work, knowledge learning outside work, but together experience and knowledge represent learning both at and outside work. Work-based learning is associated with a number of pedagogic approaches, such as experiential learning (cf Kolb), reflexive learning (cf Schön), lifelong learning (cf Candy) and self-directed learning (e.g. Boud). In these approaches action serves to integrate knowledge and experience into meaningful wholes. Vocational training has been influenced by learning conceptions prevailing in each given historical period, such as the ideas associated with the educational technology model of learning, the student-centred model of learning, cognitive didactics and constructivism.

Positioning of Pedagogic Approaches to VET and Work-Based Learning According to General Educational Coordinates

In the following section some theoretical approaches to teaching/learning processes are described as general coordinates for the positioning of educational establishments, and how more specific concepts and approaches within pedagogic development of VET and CVT (continuing vocational training) can be interpreted as examples.

General educational positions can by analogy be used as a general set of coordinates to make specific VET-related positions more transparent. It is thus necessary to emphasise that a pedagogic interpretation of VET and work-based learning is not merely an extension of general educational theories to the domain of VET.

Another consideration worth keeping in mind is that some of the specific points that are related to VET may in fact arise as critical reactions to the positions of the educational mainstream. This is particularly the case with the debates related to educational technology. Moreover, some of the specific positions connected with VET may be considered as critical reactions to assumed mainstream positions concerning the development of VET. Finally, some of these position may be linked to very similar initiatives and can thus be seen as complementary views displaying slightly different programmatic emphases. Major VET-related positions can be connected with general educational coordinates in the following way:

VET-specific positions related to educational technology approaches. Educational technology approaches are often perceived as the underlying theoretical orientation for concepts used in 'mainstream' VET planning to define occupational profiles, training profiles and related qualification goals. Often the guidelines for curriculum development are given in the form of assessment-centred frameworks (e.g. the frameworks for competence-based assessment in the United Kingdom). In such contexts the major

issues involved in the pedagogic interpretation of the educational significance of work-based learning arise as criticism directed at the mainstream approach or as pragmatic initiatives that do not require major revisions to the existing frameworks.

VET-specific positions related to learner-centred approaches. Learner-centred approaches have exerted a certain amount of influence on VET initiatives linked with target groups and with campaigns to combat social exclusion by means of particular schemes. Such campaigns have often been developed as curricular counterparts to particular diagnostic instruments designed for guidance and counselling purposes. Moreover, several learner-centred approaches have been promoted by adult educators' interventions in curriculum design for continuing vocational education and training.

The general deficit of such approaches is that they are linked to social measures or to educational niches in which the competence-giving function of the curricula does not play a major role. From this perspective the Danish General Qualifications project has presented a more overarching framework that aims to promote a learner-centred approach in various forms of adult learning without neglecting the competence-giving goals.

VET-specific positions related to cognitive psychology or cognitive didactics. Positions that are based on cognitive psychology or on cognitive didactics have been developed as psychological interventions intended to promote particular forms of situative or contextual learning (e.g. cognitive apprenticeship). Some other forms (e.g. the Finnish approach to elaborating participative intervention research where the aim is to enhance the acquisition of competencies by means of self-analysis of one's own work) have been developed in the direction of more systematic patterns of organisational learning.

Within these approaches there is a tendency to focus on knowledge of work processes that is linked with the context of work organisations and related to collective mastery of such processes. The relative strength of these approaches - the situative and contextual focus on the respective work and learning environment - is countered by the fact that they scarcely provide a basis for generalisations going beyond individual cases or for general conclusions about the development of VET curricula.

VET-specific positions related to constructivist approaches. Those VET-specific approaches that may be related to constructivist perspectives on learning and instruction are linked with such curricular constructs as complex teaching/learning arrangements or integrative working and learning assignments. These intermediate constructs have the role of integrating the contextual and self-organised elements of the learning design with the underlying curricular frameworks and the related didactic concepts and qualification goals. Thus, the constructs are meant to serve as tools for transformational didactics.

Approaches of this kind have usually been developed in very complex pilot projects or model/pilot schemes with the support of process consultants or of accompanying research. Whenever they have been brought into discussion, such approaches have been considered primarily in the context of those particular projects. As a result, there has been little or no basis for cross-fertilisation between or for generalisation across different parallel initiatives. This is a paradox, since these approaches represent an attempt to develop curricular constructs that take general frameworks into account and that are intended to be transferable.

What Next?

This final section of the chapter will consider the avenues open to be pursued by the SPES-NET project from four perspectives: conceptualising post-16 education strategies, forging links between vocational education and training establishments and enterprises, national dissemination of the project results and future collaboration between the SPES-NET and the DUOQUAL.

Conceptualising Post-16 Education Strategies

As mentioned above, one possible way to view post-16 strategies is as a continuum from track-based strategies which emphasise the separateness and distinctiveness of vocational education to unified system strategies which seek to integrate vocational and general education. In the middle of this continuum are various strategies for linkages and enrichment between tracks (Young & Raffe, 1998).

The reforms in the eight countries are involved in a process of change not limited to the simple shift from tracked to unified systems identified in the four-strategy analysis. All the countries examined have been trying to make their national systems of upper secondary education respond more reflexively to the new demands that are being made on them. One way of interpreting this change is to see it as expressed in a move from insulated to connective systems of upper secondary education. Another possible conceptualisation proposes that strategies may be judged in relation to connectivity (Young & Volanen, 1998).

The definitions of reform strategies created by the root project are hypothetical. The new partners joining the SPES-NET project make it possible to reassess the strategy framework. The context of the six new partner countries and the institutional and organisational factors related to them will provide enough new data to present a new challenge to conceptualisation of strategies and trends.

During the Post-16 Strategies project conceptualisation of strategies may possibly have been hampered by a tendency to discern extreme trends rather than alternative models. A polarising point of view carries the risk that the diversity of contexts is not allowed to generate alternative reform strategies. Polarising approaches may create situations where developmental trends and their applications appear as mutually exclusive. For example, as pure educational policy applications the extremes of tracked systems and unified systems may lead to rigid structures. On the other hand, a polarising classification of reform strategies may bring developmental discussion to a standstill.

The provision of alternative conceptual models is important also from the point of view of the diversity of concrete school reforms in different countries stemming from a great variety in historical background and economic and other contexts. In addition, even within a single country reform projects may differ in their approaches. It could thus be quite risky to offer those involved in educational reforms a single form of conceptualisation that may represent only the models created in one individual country and reflecting the particular contexts of its national reforms.

Forging Links Between Vocational Education Establishments and Enterprises: Promoting Work-Based Learning

Among the empirical phenomena to be taken into account in further work on the theoretical models created by the Post-16 Strategies project is the fact that work-based learning has become an important developmental theme in secondary education because enterprises are unwilling to take on young people entering the labour market straight from the classroom. Thus there are pressures from working life to enrich and develop learning environment in a more contextual and situative direction. To make such changes possible and in this way bridge the gap between education and working life, many countries have begun to emphasise the importance of promoting cooperation between the two fields. The SPES-NET project may continue the work of fitting on-the-job learning into the strategy framework. The previously defined strategies and their possible variants must be internally elaborated in terms of cooperation between schools and enterprises.

National Dissemination of the Project Results

As regards the utilisation of the project results, in its dissemination activities the SPES-NET project should go further in the direction of shared learning than did the Post-16 Strategies project. In the root project dissemination activities took place mainly within the partnership, where educational reforms and the parity of esteem were conceptualised in order to understand the phenomena under investigation. Mutual learning took place mainly on a transnational level. Nevertheless, each country had also their national dissemination activities whose impacts remained somewhat unknown. There was little shared information on the international level about how effective was the cooperation between researchers and their target groups to enhance parity of esteem. Nor has there been sufficient information on the response to the project's ideas about reform strategies and developmental trends among national target groups responsible for educational development work. Here the SPES-NET project might concentrate specifically on discovering what kind of response the findings of the earlier project arouse in the new partner countries on the one hand and in target groups in the countries represented in the root project linked with educational development work. In their reports the new partner countries have provided conceptual exploitation with new materials.

The dissemination of the project results in the old partner countries by using national networks focuses on instrumental exploitation, but in more interactive ways than what was the case in the earlier project. Those partners who have already completed their national dissemination plans (Austria, Finland, France and Scotland) have various ideas about an interactive dissemination of the project results. The Austrian partners, for example, will interview decision-makers. Austria, Finland and France are organising seminars where the various parties may discuss the findings of the project. Scotland is planning among other things an extensive cooperation network for exchange of ideas between organisations engaged in different forms of development work in various fields. This network will be based on the infrastructure of existing information channels.

Future Collaboration Between SPES-NET and DUOQUAL: Multiplier Effects

The focus of the collaboration between the Post-16 Strategies and the INTEQUAL projects was the mutual dissemination of the results of the two partnerships. Exchanging innovations has benefited both projects, and has led, for example, to proposals for dissemination projects and to the establishment of new partnership constellations.

The question of the credibility of the Leonardo projects involves two central dimensions, their validity within the academic community on the one hand and within the communities of practitioners on the other. Both projects have chosen to approach their subject through case studies, even if applied in qualitatively different ways. When we evaluate the implementation of such projects we are reflecting on the intensity of each comparative case study, that is, on the categories of comparison that they have been based on at different stages of the given study. Another focus of reflection is how far a project has been based on a formal and how far on a generative classification scheme. In general, it is essential to ask what kind of comparisons have been carried out, how particular comparisons have been chosen and what have been their results. Because Leonardo projects are action-oriented and because each partnership represents a broad and varied range of expertise, they should be able to generate applicable knowledge.

As a way ahead, there are some questions that might guide collaboration between the two multiplier-effect projects: Have the projects developed non-traditional solutions to problems facing policy development? What kind of new solutions have been discovered or/and what kind of transnational models for improving existing frameworks could be created through mutual or shared learning across the partnerships and projects? Further, collaboration between the SPES-NET and DUOQUAL multiplier-effect projects may also have the following three main areas of impact:

- guidelines on and decisions about upper secondary education and vocational training policy;
- work-based learning and curriculum design; and
- contributions to vocational education research policy in Europe.

Both projects have reconsidered and extended their partnership to cover more comprehensively European and national regions than the root projects did. The national and transnational networks created by the multiplier-effect projects might promote equality between different regions through exchanges of experiences from the best current practices in Europe.

The international composition and diversity of the collaboration teams is an important aspect of the projects. However, as became evident during the root projects, achieving mutual understanding, working towards shared goals, and exploiting the results of mutual learning will take longer than two years. To reach the chosen goals it is essential, in national and international networks, to create and adopt meaningful and effective working and communication methods.

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"Parity of Esteem" and "Integrated Learning" - Reflections on the Work of the Two Research Partnerships

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1 Introduction

The following text is essentially based on a discussion paper that was prepared for a workshop in the VET conference held under the auspices of the Austrian EU presidency. In the original context some examples of Leonardo research partnerships were used as an illustration of the idea of mutual learning as a European dimension within the development of VET policies.

In this context some sections of the original paper have been adjusted with a view to taking a closer look at the experiences and outcomes of two research partnerships *(Post-16 Strategies and Intequal)*. The aim is to construct a bridge from the work of these two initial projects to the multiplier-effect projects that continue their work *(SPES-NET and Duoqual)*.

However, the primary aim of this document is not to present reflections on the previous projects and on their outcomes as such. Rather, the purpose is to draw attention to the complementary relations between the issues they addressed, their modes of work and their experiences of collaboration and mutual learning. Thus, the focus is not on the individual "project histories" as such but on the development of a "project family", that is, of a shared intellectual milieu that can support capitalisation of the outcomes.

Moreover, the intention of the paper is to highlight the difficulties of individual projects (even successful ones) in responding adequately to underlying challenges to policy development. The paper tries to give strategic hints about the importance of "project families" and of "connective reflection" in the processes of knowledge accumulation and of valorisation of (linked) results.

2 Reflections on the Two Project Histories

a) The Post-16 Strategies Partnership

The partnership Post-16 Strategies was launched to study strategic frameworks (reform models, experimental reforms or particular initiatives) that promote parity of esteem between general and vocational options in upper secondary education. The main differences from the theme of the parallel partnership Intequal are the following:

- The primary focus has been on "strategies" and "policy frameworks" (whereas Intequal focused on "schemes" and their pedagogic and curricular aspects); the study covers a broad range of approaches from weak linkages towards stronger integrative tendencies (whereas Intequal focused on explicitly integrative concepts);
- The members were recruited primarily from projects that were analysing new initiatives on policy level and (if possible) on the level of curricular macro-

development (whereas Intequal was primarily addressing the pedagogic and curricular micro-development); the project idea included a manifest aim to promote transnational exchanges between the research partnership and representatives of practitioners that were involved in implementing the concepts that were studied (whereas Intequal was in this respect more purely a research partnership).

The project design was developed as two cycles of work. The first cycle was based on descriptive-analytical national reports that were produced separately and then brought together in a processing discussion. As a result of the discussion, the partnership developed a framework for relating the national models to each other as examples of four main types of strategy *(unification, mutual enrichment, linkages, vocational enhancement)*. In the second phase the project reworked and updated the national reports to presentations of "strategy clusters" within which the national developments were interpreted as variants of the given strategy. Parallel to this the research partnership organised a small-scale study visits programme for practitioners that were involved in the national reforms or initiatives that were being analysed.

As regards the relationship between the work of the partnership and the "working agendas", it has already been indicated that the focus of the partnership was primarily on the level of structural modernisation, and insights into the conceptual modernisation of VET were discussed to the extent that they were present in the various strategies. Due to the existence of the parallel partnership, the pedagogic and (micro)curricular aspects were not elaborated to a greater extent.

As regards the degree of mutual learning, the partnership put a special emphasis on developing a pattern for mutual learning among the contributors – both within and between the strategy clusters. In this respect the partnership progressed towards developing the common issues to "transversal themes" and towards reporting on a learning process of this kind. As regards the elaboration of the analysed issues to "generative themes", the partnership came to the end of its work at the very point when such a process could have been started (in particular as a cross-fertilisation between the results of the Post-16 Strategies partnership and the parallel Intequal partnership).

As regards the results achieved, the partnership has provided a basis for relating a variety of strategies (with different degrees of consolidation and implementation) to each other. This serves as an interpretative framework for other results of a more detailed character and provides a basis for further multiplier-effect activities (in particular within the multiplier-effect project SPES-NET which can also profit from the parallel multiplier-effect project of the Intequal partnership, Duoqual).

b) The Intequal Partnership

The Intequal partnership was launched to analyse the pedagogic and curricular foundations of "schemes" that are designed to integrate "general education" (that prepares for higher education) and "vocational education and training" (that provides skilled worker's qualifications). The partnership was essentially based on national projects that studied the implementation of national reforms or model/pilot schemes (accompanying research) or on projects that provided empirical follow-up data on the outcomes of recently implemented models.

The research design of the partnership was essentially based on two phases of work. The first phase provided descriptive-analytical characterisations of the schemes that each of the members (or member teams) was analysing. The second phase was completed in subgroups that focused on particular themes that were essential for understanding the nature and/or impact of the schemes ("integrated learning", "synoptic assessment", "preparation for higher education", "tracing the careers of graduates"). Originally the partnership had also foreseen a transfer-promoting third phase in the participating countries, but this was not included in the funded work programme of the project. Instead, the project will be immediately continued by a multiplier-effect project (Duoqual).

The partnership focused particularly on the conceptual and pedagogic-curricular levels of modernisation of VET. The partnership distanced itself deliberately from the level of "systems" or "policies" in order to make different innovative schemes transparent to each other as pedagogic and curricular constructs (whatever their systemic status may be in the respective countries).

The partnership took several measures to develop itself as a comparative project with a collaborative working style and as an integrative project environment of several sub-projects. The project developed in both phases two kinds of platform for mutual learning (the plenary sessions and the subgroups that were formed between the closely matching schemes and according to thematic interests). Within these frameworks the project took steps towards developing the common issues to transversal themes. However, since the transfer-promoting phase was given up, the project was deprived of the phase where the common issues would have been elaborated to generative themes. In this respect only the treatment of synoptic assessment was developed in that direction (however, only as a limited reflection on alternative futures for a single national scheme without a real comparative setting).

As regards the main outcomes of the project, it has obviously created a new awareness of different degrees of integration between general and vocational education. Moreover, it has developed some of the aspects that have been studied in the sub-groups to transversal themes. This effect has been supported by a joint reflection on "learning from each other" and by a summarising report on the statements of individual members (or member teams).

However, for the purpose of developing generative themes the partnership would have required a further working phase (in which it would have needed to confront the systemic and policy-related preconditions for transfer of innovations in the various countries). Such a confrontation could also have been given another form - an in-depth cross-fertilisation with the parallel partnership Post-16 Strategies. Now these options are available on a minor scale for the parallel multiplier-effect projects of the two partnerships.

3 Reflections on Conceptual Gaps Between the Outcomes and Underlying Challenges to Policy Development

From the above quick examination of the projects (from the perspective of the key qualifications debates) it seems that there is a conceptual gap between the underlying structural problems and related challenges to policy development (as determinants of policy-related research needs), and the conceptual and methodological frameworks

within which research can be carried out (as determinants of manageable research questions and of consistent research work).

A structural gap of this kind has consequences for any further attempts to "capitalise" the outcomes of the projects.

In principle there are two opposite strategies for dealing with such a structural gap:

- a *minimalist approach* involves an endeavour to reduce the gap by limiting expectations of "research contributions" to providing answers to pre-defined questions. Where this has not been possible because of the complexity of underlying issues, a dissemination phase would be suggested where there would be an attempt to reduce the complexity and to translate the results into simpler formats;
- a *'bridging' approach* entails bridging the gap by recognising the limited possibilities of individual projects to respond to interrelated sets of structural problems and the associated similarly interrelated policy challenges. In this approach, instead of trying to find "matching" answers from individual research results, those involved try to link the joint results and the accumulated experience of several projects to the underlying needs. Thus, this approach is an attempt to link processes of *knowledge accumulation* (contextual interpretation, cross-fertilisation and mutual validation of results) to processes of *valorisation of knowledge* (as inputs for policy development).

The brief project histories of the two research partnerships are clear examples of cases that have grown beyond a reductionist approach to capitalisation. It is obvious that the added value of projects of this kind can best be "capitalised" through further efforts to link the learning processes and the results to complementary themes. However, these new linkages should not be arbitrary. Instead, research-based inputs must be related to a conceptual prototyping and pre-testing of emerging "strategy packages". Obviously this requires a new kind of reflection phase (following the actual work of a project) which also includes a particular kind of cross-fertilisation between research work and policy development.

Such interaction can be made easier by tools that help to make a situation assessment that combines the aspect of knowledge accumulation (integration of results into knowledge structures) with the aspect of valorisation (relevance to policy development).

In the following section an attempt is made to use a catalogue of "central themes" as a tool for such a situation assessment. The central themes provide the structure of the assessment while the outcomes of the projects are taken as contributions to it. The main aim is to illustrate the use of the catalogue as a tool and to demonstrate how a limited sample of projects can provide a starting point for a capitalisation process. The purpose is not to "evaluate" the particular projects but to explore to what extent they have covered the various aspects of the "working agendas" and the themes of the "catalogue". And vice versa - the examination gives indications of the extent to which the working agendas and the catalogue can link the results and the remaining open questions to the planning of further measures.

a) "Reflection on Conversion Principles" Between "Bodies of Knowledge" and "Work Process Knowledge"

This kind of reflection has not been an explicit research issue for the two partnerships. Each of them provides some information on the topic but neither has undertaken an in-depth process of reflection. In the work of the Intequal partnership this issue was approached in the exploration of integrated learning. In the work of the Post-16 Strategies partnership this theme was discussed inasmuch as it has emerged in the development of the particular strategies.

Thus, the results of the partnerships (whether taken separately or considered together) give no immediate answers to questions concerning the role of "conversion principles" in future-oriented curriculum development. This level of reflection has to be elaborated by means of further questions. However, such questions can draw upon the preparatory work of the two projects and be formulated as questions that pick up the reflection from the immediate results (either by "returning" to the national issues or by moving on to possible "extension areas").

b) Reflection on Different Uses of the "Core Curriculum" and "Open Structures"

This is again a theme only partially covered by the two partnerships. In the partnerships Intequal and Post-16 Strategies partnerships the issues of the "core curriculum" and "open structures" were linked primarily to the systemic and curricular frameworks of "unified" upper secondary education. In these contexts the notion of a core curriculum is related chiefly to general "core subjects". Thus, the specific issue of shaping "core structures" for vocational learning was not elaborated as a parallel approach to core curricula. In this respect the reflections on the interplay between the core curriculum and open structures had an "educationalist" accent.

In order to make proper use of the key qualification debates in curriculum development for VET, there is a need to develop also the issue of core curricula for VET and to explore different alternative options for providing core structures or "core shapes" for vocational learning processes. Moreover, it is necessary to study how such constructs could be combined with the contrastive principle of developing open structures (to promote mobility and flexibility within vocational learning). Here the two partnerships have again clarified some of the starting points but not elaborated the theme to the extent that the spectrum of essential options would be covered more completely.

c) Reflections on Uses of Complex Teaching/Learning Arrangements (or Similar Designs) as Integrative Constructs

This theme has not been a crucial issue for the two partnerships, but they do nevertheless give some indications of its relevance. In the work of the Post-16 Strategies partnership it is touched on in the context of the strategy cluster of enhancement of vocational learning. In the work of Intequal it is touched on in the discussion on diverse approaches towards integrated learning. However, none of the partnerships entered into an in-depth discussion on this topic on an European level. On

national level some of the national partners have been involved in conceptual debates and pedagogic-curricular development initiatives that are linked to this topic.

The importance of this theme is connected with the two other issues explored above. If progress is to be made in conversion principles and in reflection on core curricula for VET, it is evident that there is a need to discuss the potential of complex teaching/learning arrangements (or of integrative working and learning assignments) for promoting key qualifications.

However, such reflections can also start from a direct confrontation with current policy priorities (e.g. promoting flexibility, transferability and mobility within vocational education) and particular "vehicular designs" (e.g. complex teaching/ learning arrangements). Such an approach (as has been launched by the COST initiative Flexibility, Transferability and Mobility as Targets of VET) contrasts "educational megatrends" and particular pedagogic and curricular constructs. The potential of this initiative to provide a broad and comprehensive platform for this particular theme has to be explored when the process has fully started. At present it is appropriate to note that the contextual mapping that has been carried out by the two partnerships discussed above provides some complementary information on the systemic and curricular frameworks which the new vehicular designs try to penetrate.

d) Reflection on Uses of Synoptic Assessment to Measure Cumulative Learning Effects Throughout the Curriculum

This theme is more specific than those mentioned above (however, for the key qualification debates it is equally central). Thus, it appears as a specific issue only in the work of the Intequal partnership. However, the assessment issues can be traced as essential elements of some of the strategy clusters that were analysed by the Post-16 Strategies partnership. Yet, the partnership did not enter into a debate on alternative prospects for assessment opened up by the strategies for promoting parity of esteem identified by it.

In view of the previous remarks it is worthwhile to note the specific way in which the theme of synoptic assessment is dealt with by the Intequal partnership. Although the issue is discussed only in the context of one country (UK) and one particular scheme (the GNVQ models), the analysis opens the issue for European debate and invites the European audience to reflect on possible alternative applications of synoptic assessment. In this respect the relevant section can be considered a prototype of a comparative study without an actual possibility to work in a comparative context. Moreover, it is worth consideration as a prototype of a concluding step that immediately launches a debate on capitalisation (on its possible alternative models).

For the general development of key qualification debates (and in view of the other central themes that have been mentioned above) it is of importance that the issue of synoptic assessment is explored in a wider context than was possible in the Intequal partnership. It is apparent that several curricular strategies to promote key qualifications lack adequate assessment tools (a lack which limits the scope of transfer). Moreover, in order to link the debates on key qualifications to the respective debates on "pathways" or "progression" or "access to qualifications" it is necessary to clarify what kind of concepts of assessment are included in the respective strategy packages.

e) Reflections on the Prospects for Capitalisation of the Outcomes

This brief examination of the outcomes of the two partnerships has indicated the following possible working perspectives for capitalisation measures:

- *conceptual* re-examination of joint results and experiences (by developing an awareness of conceptual achievements of the particular projects and of conceptual deficits in linking the results with relevant contexts of policy development);
- *connective* enrichment of the achieved knowledge base (by linking the results of particular projects and underlying policy issues to parallel European results that are related to neighbouring policy issues); and
- *focused* recontextualisation of the enriched knowledge base (by translating some of the outcomes as focused contributions to national policy development).

The examination also indicates that capitalisation of this kind requires group processes that are backed up by external facilitators (who have the task of supporting the steps towards re-examination, enrichment and recontextualisation).

In such reflection processes *knowledge accumulation* is not understood as a mere addition of results and findings. Instead, the aim of the process is to create linkages between results, to discuss contradictory findings and to identify conceptual deficits that hinder knowledge transfer. Moreover, in such a process it is possible to learn that contradictions or deficits are not necessarily the results of particular shortcomings of individual projects. Instead, the process of joint reflection can generate new frameworks and bridging methodologies which may help to overcome some of the difficulties. Finally, through shared reflection those involved can more plausibly process separate findings and particular conclusions towards tentative strategy packages or strategy menus.

However, a successful capitalisation process can hardly take place if projects are brought together only on the basis of artificial criteria (even if the main themes were seemingly related to each other). For successful capitalisation processes to be launched there must be a real match of scientific interests and a well-founded expectation that joint re-examination, enrichment and recontextualisation will lead to new insights. Moreover, there must be a shared willingness to make an effort to re-interpret the outcomes of such processes as possible inputs towards policy development.

From an organisational point of view it is worthwhile to consider in what way such capitalisation processes can be supported by the following kinds of measure:

- through initiatives by European research cooperation networks (and by facilitating international organisations such as CEDEFOP and ETF on the European level) which can engage themselves as "task forces" for conservation and revitalisation of the heritage of European projects;
- through initiatives by national agencies which can position themselves as hosts of national "root projects" and as receivers of the re-examined and enriched European insights; and
- through special measures within European cooperation programmes which can foresee a special role for capitalisation activities.

European Dimension of Surveys and Analyses of Vocational Education and Training: Brief Remarks on Action Research and Evaluation Research From the Perspective of the European Dimension

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1 European Dimension of VET Research

Although many supporters of the European "project" may like to stress the European commonalities, in my opinion the importance of the subsidiarity principle should by no means be overlooked where VET is concerned. The reason is not so much that this position coincides with official European policies.

Attwell (1998, pp 77-78) has made, under the heading "Convergence of Trend: Divergence of Effect", an important point which at first sight might appear paradoxical: One may assume that in the course of the integration towards a "European society", the VET systems of different European countries will encounter more and more similar or sometimes even nearly equal challenges (Kuhn, 1998, pp. 111-112). Nevertheless, because the starting points for meeting these challenges are very different, the effects of such challenges will probably be even more varying. This is so because the VET systems in the various countries had been in the past - at least to some degree - adapted to specific economic and general cultural circumstances. Thus it seems that to meet similar challenges the individual countries must implement rather different measures. For instance, in countries with a well-developed VET system it might be sensible to support measures aiming at updating VET (e.g. in the sense of "higher vocational education" in the Netherlands) which, however, at the same time may carry the risk of lowering the status of "lower VET". In countries with a weak tradition of VET, however, such an approach seems to be quite dangerous, because what those countries need most to ensure sustainable development could be precisely a strengthening of the sector of lower VET, adapted not so much to high technology as, rather, to intermediate stages. Thus the importance of training, for instance, a conventional electrician should not be overlooked by adhering to a myth of modernisation. (It should be noted here that especially in the US the 1990s have seen the lowest increase in productivity - averaged across the workforce as a whole - since the 1940s. This fact - an increase of a mere one per cent per year - is constantly neglected in discussions about industrial change.)

Whilst this may seem to represent a statement about VET policies, it has important consequences for European VET research, raising as it does the question whether it might be impossible to achieve a European dimension or "European added value". The answer is no, it is not impossible!

On the contrary, the paradoxical situation outlined above, which may even be termed "dialectical", makes it even more necessary to organise mutual support between the European countries. Thus the tradition of self-employment in such countries as, for instance, Greece, could possibly offer lessons for countries such as Germany, at least in opening up the horizon for new research questions. For example, could the well-developed German VET system contain (hidden) features which prevent people from becoming self-employed?

Therefore, in my opinion, at the heart of the European dimension of VET research lies the concept of "*mutual learning*". This idea has been, with special emphasis, employed and developed further in the Leonardo projects Europrof, Post-16 Strategies and Intequal. Kämäräinen has (1998, pp. 58-59), from the perspective of having monitored these projects among others, stressed the potential inherent in of such mutual learning processes, leading, where several such processes come together, to a shared learning process.

I believe that these mutual learning processes are the best way to create a "European culture of VET research", thus generating a common intellectual milieu, consolidating the conceptual and methodological foundations of a particular discipline of VET research, promoting the development of new ideas and innovations (Cf. Kämäräinen, 1998, loc.cit., p. 68; Attwell, 1998, loc.cit., p. 70).

I feel that this method of mutual learning is probably the main road to achieving those aims, possibly even the only road likely to prove successful.

Because in the process of developing and implementing practical innovations everyone involved also learns about the background to the theoretical ideas prevailing in the different countries, a more intensive exchange of theoretical approaches may also to be anticipated.

2 Action Research and Evaluation Research

The idea of mutual learning through collaborative research in European co-operation projects can also shed some light on the relevance of action research and evaluation research in the context of these projects. I shall not attempt, in this brief outline, to take up the general epistemological and pragmatic problems connected to these research approaches. In view of the arguments presented by Nyhan (1998, pp. 23-29), I propose to address these problems directly in terms of the very task at issue, that is through reflections on the aims and possibilities of European co-operative VET research.

If mutual learning is the main or even the only way - for the foreseeable future - to construct a European VET research culture, then the range of epistemological problems faced by both action and evaluation research in Europe could be narrowed down because both could be defined in a special sense. This might actually make it easier to tackle the epistemological problems envisaged.

As an example, especially in the German cultural tradition the idea of VET research - in so far as it is connected to educational/pedagogical research - as a "practical science" has behind it several decades of development. This conception of VET research seems especially appropriate to the methodology of mutual learning because it rests on the idea of "communicative validation" (as put forward in Habermas' *Theory of Communicative Action, 1981*).

Without assuming the point of view of radical constructivism, this means that the validity of research findings should be ensured mainly through communicative understanding because in most cases the criterion of "objectivity" has proven very disputable. In European projects, given the different cultural backgrounds (also with respect to research cultures), a common understanding is often, according to my experiences, difficult to accomplish. Nevertheless, it is at least very probable that the horizon of the participants of such collaborative projects has been opened up to admit new ideas and practical approaches. In this way, the method of aiming at mutual learning enables in (nearly) all cases:

- a certain degree of enhancement of mutual understanding and

- a clearer insight into problems where shared understanding is difficult to achieve - and maybe into the reasons for such difficulties.

2.1 Action Research

In view of the (more recent) tradition behind this concept (that is, that of direct involvement of researchers in the activities they are investigating) it seems better to talk about "action-oriented" research or "intervention-oriented" research (Kämäräinen, 1998). Along the same lines Dietzen and Sellin (1998, p. 164) stress, following Norbert Elias (1987), "commitment and distance".

If mutual learning (by concrete individuals engaged in processes of direct collaboration) is the aim then there is no other way than to take into account individual interpretation/understanding ("hermeneutics"). Thus, if what has been said above about the importance of mutual learning for European projects is true, then the main methodology has to be hermeneutical.

In spite of the general problems of credibility, objectivity, reliability and so on linked with action-oriented research, the consequence seems to be that as applied to special cases (e.g. countries), the "scientific" (in the sense that the word has in the methodology of physics) paradigm of accumulating knowledge is not viable in European co-operative research striving towards mutual learning. It should be noted here that because it maintains a balance between commitment and distance, action- or intervention-oriented research is always - to a substantial degree - at the same time evaluation research. It will always aim at a higher degree of "enlightenment" of the participants, an enlightenment which should enable them to act, within the circumstances of their respective countries, in a new way also with respect to practical impact.

2.2 Evaluation Research

I shall largely leave out the special case of evaluating European programmes, offering only a few remarks.

These programmes can be looked at as being a special kind of Europe-wide "action". Therefore, if one employs the idea of intervention-oriented research, then what has been said about it can very well apply here too. This means that such evaluation projects should similarly

- be carried through by a transnational team (co-operative research);
- try to realise at least some aspects of collaborative research, that is, their outcomes should emerge as the result of processes of mutual learning (at best: of shared learning processes); and
- adopt features of formative evaluation, either when the given programme is running or in the course of a possible follow-up programme.

As far as evaluation research within a programme is concerned, that is as a methodology for individual Leonardo projects, mutual learning as the main aim clearly entails both possibilities and restraints. This means that

- as in intervention-oriented research, it should be carried out by a collaborative transnational team; and
- it should aim at formative evaluation.

Indeed, the Europrof, Intequal and Post-16 Strategies projects realised much of such an approach. Overall, from the perspective of mutual learning the difference between intervention-oriented research and evaluation research is only one of the extent of the intervention. Evaluation research without any kind of interventional aims at all does not seem to lead to results useful in mutual learning. As regards epistemological problems, I would here again like to argue in favour of communicative validation where this concept is used in Habermas' sense. This is, in some respects, nearly equivalent to the methodology of mutual learning. And, as has been said before, mutual learning seems to be seldom possible on the basis of the results of "scientific" evaluation (in a physics-like sense) because physics at least attempts to eliminate all room for different interpretations. However, in its striving to control all variables such an approach is in danger of leaving out the complexity of the different VET cultures.

Finally, the historical context - for each individual country - has to be considered in order to gain some mutual understanding of the different VET cultures. Historical understanding, however, is especially influenced by cultural background. This is true also with respect to the criteria of interpretation within an individual country, which change quite fundamentally in the course of time. Indeed, to take an example from German culture, the idea of hermeneutics as a scientific method in its own right was established by Dilthey (1882) in the 1880s in the field on historical interpretation.

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PART II

NEW PARTNERS' COUNTRY REPORTS: NATIONAL REFORMS IN UPPER SECONDARY EDUCATION

National Report on Belgium

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1 Introduction

The national report on Belgium will present a brief history of the education system in Belgium together with a description of reforms carried out and strategies adopted in order to improve parity of esteem between initial vocational education and academic/general education.

The methodology followed in producing the report is based on:

- reading the interim report of the Post-16 Strategies project (Lasonen, 1997);
- meetings and exchange of information with teachers in the upper secondary vocational education system: the manager of a dual vocational education and training centre (CEFA - *Centre d'Éducation et de Formation en Alternance*), a researcher at the University of Liège (ULG), a person attached to the Federation for the Catholic Secondary Education System (FESEC - *Fédération de l'Enseignement Secondaire Catholique*) and the Secretary of the Council of Education and Training (CEF - *Conseil de l'Éducation et de la Formation*);
- collecting information at the CEDEFOP documentation centre in Brussels (ICODOC - *Intercommunautair documentatie-centrum voor beroepsopleiding*);
- writing of the current report, which includes an analysis of the situation, based on a tool created and provided by the partners of the previous project in order to harmonise the results of the various countries: "Criteria for Mapping National Strategies" (Lasonen & Young, 1998, pp. 201-203).

Since the three communities in Belgium organise the education system almost independently, it is important, at this stage, to specify that for feasibility reasons the information was collected essentially within the French community.

We take this occasion to thank the people who have helped us for the time they spent with us collecting relevant information on a very sensitive question.

2 The Education System in Belgium

First of all, it appears necessary to remind the reader that according to the Constitution (Article 2), Belgium includes three communities: the French Community, the Flemish Community and the German Community, where the constitutive elements are both culture and language. Since 1989, the Communities are the decision-makers with regard to education. Only the minimal conditions for the awarding of certificates, the norms of compulsory education and the teachers' pension schemes are the responsibility of the Federal Government.

The schools in Belgium are subdivided into three networks: the public schools network, the public grant-aided schools network (provinces and municipalities) and the

private grant-aided schools network. Each of them has a specific "organising body" (the municipalities, the provinces or municipalities, private institutions). These organising bodies have the responsibility, among other things, for pedagogical methods, and for determining the educational provision (options).

Parents and children are free to choose the education network and school. The education system is organised, in the three communities, as follows:

- primary education (6 to 12-year-olds);
- secondary education, structured either as traditional education (Type II secondary education) (two stages of three years) or as;
- the "reformed" secondary education system (Type I secondary education) (three phases "*degré*" of two years); the last being the most popular system. In Flanders, these two types of education have been completely unified since 1994-1995: the education system is structured around three cycles of two years. As a rule, education ends when students reach the age of 18; and
- higher education: non-university higher education establishments (*hautes ecoles.*) (short- or long-type education cycle), and universities.

Secondary Education

Full-time secondary education is organised within four basic schemes:

- general education (compulsory education and various optional courses);
- technical education (acquisition of general, technical and theoretical knowledge);
- vocational education (practical instruction in a specific occupation); and
- artistic education.

In the *French Community*, in the traditional education system guidance to help students choose between the various schemes starts at the end of the first cycle. In the "reformed" education system, this guidance process usually starts in the third year, but it may begin in the second year when the student meets many difficulties during the first year.

In the third year, the "reformed" education system is organised into two streams:

- the transition stream, that prepares the student to enter either higher education or working life (general, technical and artistic education);
- the qualification stream which aims at:

a) as regards technical and artistic education: preparation for working life, while also offering the possibility of going to a non-university higher education establishment;
b) as regards vocational education: preparation for entering working life, while also giving access to studies at a complementary secondary level, or at a higher level (excluding university) provided the student has obtained his certificate of completed upper secondary education (CESS, *Certificat d'Énseignement Secondaire Superiéur*) after a seventh vocational year.

In the *Flemish Community*, student guidance begins in the third year (Conseil National du Travail [CNT], 1998).

Dual Education (CNT, 1998)

An act of 29 June 1983 extended compulsory education to the age of 18. Since then, young people are supposed to be in full-time education until the age of 16 (until age 15 if the second year of secondary education has been finished) and then in part-time education until the age of 18, that is to say, they:

- either enter **part-time training** or training defined by a royal decree as corresponding to compulsory education. In the French Community, the CEFA (Centre d'education et de formation en alternance) welcomes young people aged 15 who have completed the first two years of secondary education, or young people aged 16 without any other conditions. Each week, 12 to 15 periods of 50 minutes are dedicated to general training. If the student signs a contract, then he receives following practical training in an enterprise. Unfortunately, this is a track where students who have been excluded both from school and from work are relegated (Drouguet, 1998, p. 36);
- or conclude an **apprenticeship** contract for paid work (industrial apprenticeship) offering young people aged 16-18 an opportunity to receive both a theoretical education and practical training in approved training centres and enterprises;
- or take up apprenticeship training offered by the **Middle Classes** (*Classes Moyennes*) (under an apprenticeship contract) which allows young people aged 15 and over to learn an occupation suitable for self-employment, receiving practical training in entrepreneurship and instruction in general and technical theory in a Middle Classes training centre.

3 Evolution of the Vocational Education System

In her history of the Belgian vocational and technical education system, *L'histoire de l'enseignemet professionnel et technique en Belgique (1860-1960)*, D. Grootaers (1994) suggests undertaking an in-depth study of the first hundred years of the technical and vocational education system in Belgium. This education system paralleled the economic and social evolution of the country and is the result of the wish of promoters of traditional apprenticeship training to create a particular type of education system. Originally the vocational and technical education system was totally independent from the general education system.

In fact, a technical and vocational education system appears in 1867. In 1953 there emerges a new education system: the secondary education system that is the result of the integration (not the merging) of two systems that until then had been separate, the technical education system and the secondary "middle" (*moyen*) education system.

Furthermore, the process of selection and the student guidance from secondary (moyen) middle education to technical education and from technical education to vocational education is being made official. Student guidance converts vocational education into a relegation track, a process that has been speeded up by the 1970s economic crisis and by the 1983 act extending compulsory education until the age of 18 (Drouguet, 1998).

In 1971 starts the "reformed" education system which aims at promoting both educational equality (political project) and the individualisation of evaluation and guidance (pedagogical project).

In 1986 the Government undertakes measures that, in response to reactionary and elitist arguments as well as to arguments linked with rationalisation and budgetary considerations, "empty the reformed system of its whole substance". (Drouguet, 1998).

In 1989 educational decision-making was devolved to the communities. In 1991, 57 schools operating in the French Community launched an experimental reform of the first phase (*degré*) of vocational education.

In 1997, the Missions of the School decree (*Decret Missions*, Mission Decree) organises the four last years of secondary education into two streams:

- general and technological education, called the transition stream. The purpose of this stream is training students for higher education;
- vocational and technical education, called the qualification stream. This stream gives access to a Qualification Certificate and, theoretically, to higher education.

4 Description of Relevant Reforms/Strategies

Vocational education is now mainly based on its connection with work. However, it is not close enough to the reality of the market.

Although in Belgium initial vocational education remains a relegation track as compared to general upper secondary education, it seems that there is now a political will to make changes in the education system.

The following chapter is designed to describe some of the reforms initiated and/or strategies adopted in Belgium in order to develop the initial vocational education system and improve its image.

4.1 Changes in the Education system Itself

4.1.1 The Guidance System

The decree defining the missions of the education system (*Decree "Missions de l'Ecole"*, the Mission Decree) given by the Ministry of Education in July 1997 states that at the end of the first cycle of secondary education, the students and their parents will be fully informed about the occupational, technical, artistic, general, and technological education and training organised in the last two cycles of secondary education. They will also receive information on the dual training system organised under the Compulsory Education Act of 29 June 1983.

Schools are supposed to organise visits to or short observation training in the educational establishments that organise both the transition stream and the qualification stream. The aim of this measure is to promote a positive attitude among students at the end of the first phase of their secondary education.

This strategy is a response to a political will to let students and parents discover for themselves what vocational and technical education are.

4.1.2 7th Vocational Year

A seventh school year has been introduced in the following fields:

- technical education;
- artistic education: a year of specialisation or preparation for higher education;
- vocational education: a year of specialisation or preparation for obtaining a secondary education certificate (CNT, 1998).

The aim of this additional year of vocational education is to help students obtain the upper secondary education certificate CESS.

Through this reform, vocational students acquire a certificate equivalent to those granted to students completing the general track. This gives them the opportunity to apply for a position in the public sector.

This additional school year has also been used to pursue two more strategies:

- between 1987 and 1992, a GCCP course *Gestion Collective de Projets Pluridisciplinaires* (Collective Development of Multidisciplinary Projects) has been introduced. Students are given 1 or 2 hours per week to develop a project and implement it;
- in 1995, the *Gestion et Opérationnalisation du Projet Personnel* (Development and Implementation of a Personal Project) programme was introduced to enable students to work on a personal project and implement it.

If the CESS is theoretically identical with the secondary education certificate obtained in the general track, the actual student curriculum, expressed in mastered competencies, is obviously different.

It might be better characterised as a social recognition of a 13-year compulsory education route. It would be advisable to define the competencies that a student must have to obtain such a certificate. This would make an effective equivalence more credible and provide access to higher education.

The additional school year has increased the number of students entering higher education. This is due to the higher educational level attained by these students. Nevertheless, the number of people who can gain access to this level is low as compared to the population that meets with difficulties, and who are often discredited by the mere fact that they have taken the vocational track.

In addition to qualifying its holders for higher education, obtaining a CESS should also give them access to some occupations, subject to conditions yet to be defined (Demoustier, 1997).

4.1.3 Positive Discrimination

In order to compensate for social inequalities, the student-teacher ratio has been improved.

Students from the vocational and technical education system are allocated more teaching hours than students in the general track.

Furthermore, the Missions of the School Decree provides, under certain conditions, a more systematic follow-up of students providing from risk areas.

4.1.4 The Workshop Schools

In 1978-1979, some schools decided to experiment with a reform on vocational education by creating in the first phase of the vocational education system what they called "*classes-atelier*": workshop classes.

A single room is organised in various areas, each reserved for a specific apprenticeship. Such an arrangement allows students from two classes to work together and shift from one apprenticeship to another without moving to another room. This encourages the use of active pedagogical methods (mutual teaching, individualisation, contract pedagogy, project pedagogy...) for teaching both general and technical subjects.

This philosophy attempts to reconcile the students with the school and with themselves. A climate of tolerance has been created that allows both students and teachers to express their difficulties, successes and their future projects.

Andre Drouguet (1998, p. 121) suggests reinforcing the effect of such workshop classes and reducing the "mess" of school failure by extending the workshop classes and their principles to the vocational education system as a whole.

4.2. Link between Enterprises and Education

Since 1995, business life has been showing interest in the education system. Some industrial sectors fund some fields of the vocational education system.

Schools' lack of means compels them to invite enterprises to come and see what they are doing and then help them to improve training. Also, such contacts often gives the schools the opportunity to visit fully equipped factories.

4.2.1 Education and Training Council

One of the missions of the CEF (*Conseil de l'Education et de la Formation*, Education and Training Council) is to make sure that education and training strategies match labour market requirements.

One of the solutions envisaged by the CEF is to organise a credible system of recognition of occupational competencies both by the education system, and by working life (CEDEFOP INFO 3/1997; see also description of the CCPQ provided in sections 4.2.2 and 5. below).

4.2.2 Commission Communautaire des Profils et Qualifications - CCPQ

The CCPQ (Community Commission on Vocational Profiles and Qualifications) was set up in July 1995: following an agreement between the education system and the occupations, thus creating a link between the two sectors. The aim is to define both qualifications profiles and training profiles. That is, the Commission is making an effort to identify the various competencies brought into play in a specific occupation.

Another aim of the Commission is to identify the occupations that have ceased to exist and thus prevent people from being trained for an occupation that offers no prospects.

4.2.3 Total Quality

Total quality norms are being introduced in some vocational training schools in order to respond to the needs of industry.

External consultants are training teachers in Total Quality. The aim is the acquisition of concepts and procedures...Total Quality should be applied in various fields such as courses, discipline, cleanliness, time schedules, orders for materials, the students' work...

4.2.4 Organisation of Competitions

There are some competitions organised in a view to promoting occupations. Some examples are shown below:

- *Centre de perfectionnement du soudage* (Centre for Developing Welding). This centre organises competitions to which the schools may send their students. It is supported by Fabrimetal;
- Competition of the National Union of Carpenters; and
- The Olympiad of Occupations, organised every two years, where qualified students may compete.

4.2.5 The Centre for New Technologies

This centre is equipped with high-tech equipment and is open to a certain number of secondary schools and non-university higher education establishments. There are four centres: in Brussels, Hainaut, Liège and Luxembourg.

The aim of these centres is to promote the continuing training of teachers by meeting them, showing them new technologies and offering them a purchasing centre.

4.2.6 Techni Futur 1&2 (Liège) and Mini Usine (Mons)

Techni Futur is another way of letting teachers and students see new technologies in the fields of digital communication, electronic, machining, bond technology...

Mini-Usine, in Mons, is a simulation of an industry using software called Micro-Usine (micro-industry).

4.2.7 The Charter of Dual Education

The **Charter of Dual Education** was created in 1993 (Eurydice, 1997). It expresses a joint undertaking by the education system and the employers' associations in Wallonia and Brussels to gradually set up dual education within the third phase of the full-time education system. The school remains the institution responsible for delivering the training, and the young person keeps a status of student. The enterprise agrees to

integrate the student into real work situations and commits itself to designating qualified tutors who will be working in close collaboration with teachers from the school. The teacher and the tutor become the true agents of the apprenticeship as regards the initiation phase, the definition and follow-up of task assignments and the evaluation of the students.

The charter has the following objectives:

- helping young people to construct their personal and occupational project;
- reinforcing and actualising their knowledge and skills;
- introducing them to their future working environment;
- enabling them to acquire a recognised qualification; and
- facilitating their first steps in working life.

5 An Application of the "Criteria for Mapping National Strategies" to Belgium

This section of the report emphasises the strategy of the **CCPQ**. This strategy seems in fact to correspond with an actual general wish for rapprochement between the world of work and education through collaboration in the definition of qualification and training profiles.

The strategy is a result of a more global reform incorporated in the general framework of the decree defining the priority missions of the primary and the secondary education system and organising the structures required to perform these missions.

5.1 Main Focus of the Strategy

The aim of the CCPQ strategy is collaboration between both the enterprises and the educational sector in defining the precise competencies to be linked to the various certificates, also involving a close relationship with existing occupations.

The focus is on the definition of training profiles with a view to designing formal systems of training reference (Commission Communautaire des Professions et Qualifications, 1998, p. 3): training structures, certification, contents, methodologies and means, credit transfer to in higher education or other training providers...

5.2 Purposes of the Reform, Experiment or Policy

The CCPQ's mission is to make proposals to the Government concerning the training profiles that correspond to the range of options available in the third phase of the qualification stream, that is, all those competencies required for certificates of completed secondary education (Decree of the French Community of 27 April 1998, Article 6 § 1).

In other words, the reform aims at a better fit between the qualifications delivered by the education system and the needs of working life. In order to achieve its goal, the CCPQ has set itself four specific tasks:

- definition of qualification profiles;
- definition of training profiles;
- translation of the activities and competencies included in training profiles into formal training reference;
- permanent assessment and monitoring pilotage of the system.

5.3 Concept of Parity of Esteem

The reform aims at a profound revitalisation of the qualification stream, as regards both technical and vocational education (CCPQ, 1997).

The creation of training and qualification profiles should improve the attractiveness of vocational education by establishing **a better fit between training and the needs of enterprises.**

Such a strategy should make it possible to improve both **employability** and **access to higher education (by means of credit transfer)**.

In fact, the collaboration of enterprises, education and labour market organisations in the planning and implementation of this joint task should make those involved increase their esteem for both the vocational education system and the students succeeding on this track.

5.4 Problems of Equality

The present reform does not seem to adequately address the problem of inequality that has existed as a tradition (culture, politics, general attitudes towards vocational education).

In fact, the tracks remain distinct, separating general education students step by step from vocational education students.

Vocational education would be more esteemed if qualification and training profiles would lead, among other things, to demanding training programmes "that would be likely to attract good students" (Gootaers, & Tillman, s.d.).

5.5 Progression

The present reform should allow a vertical progression by enabling students to improve their competencies by moving from one qualification level to another. In fact, vocational training programmes link related occupations according to the requested level of competencies. As an example, in training in business and administration a first level of training would prepare students for a basic clerical jobs. A second level would qualify them for more demanding positions.

5.6 Scope of the Reform

The reform concerns the third phase of vocational education.

5.7 Equivalencies / Recognition

There is a true recognition of this measure as it has been implemented through a ministerial decree (Decree of 27th April, 1994). It concerns the French Community in Belgium.

Furthermore, it officially involves partners from the education system, employers, labour market organisations, as well as training providers (as experts).

5.8 Curricular Toolboxes

Vocational education curricula have other goals than strictly vocational training. They include a search for a broader vocational and social culture, for intellectual development through technical or practical training, going much further than what is required for practising an occupation.

These goals should be respected by the reform, involving the organisation of, alongside the courses intended to provide students with the competencies defined in the relevant training profile, other courses intended to make them into workers who are also citizens, educated and clear-headed, capable of understanding the functioning and logic of today's enterprises, and of finding themselves a place in contemporary economic and social reality (Gootaers & Tillman, s.d.).

5.9 Teaching and Learning Arrangements, Pedagogy

The study programmes suggest apprenticeship situations and indicate apprenticeship contents (compulsory or optional) together with methodological approaches, which should enable students to acquire the competencies defined in training profiles (Mission Decree, Article 50 § 4).

A part of vocational training may be organised as training in enterprises (Mission Decree, Article 53).

The activities involved in an apprenticeship may be grouped together in order to construct cultural or interdisciplinary activities (Mission Decree, Article 54).

5.10 Certification and Course Structure

The certificates obtained on completion of vocational education give access to employment.

Actual conditions also enable students to obtain study credits.

5.11 Assessment - Evaluation

Standardised test batteries corresponding to the training profiles are disseminated in the various schools by the Government.

Educational monitoring also includes verifying that student activities correspond with the required knowledge and skills. The equivalence of the level of the tests administered to students with the tests produced by the Evaluation Tools Commission is also verified (Mission Decree, Article 55).

5.12 Student Choice and Guidance - Orientation

See section 4.1.1; The guidance system.

5.13 Networking and Organisational and Institutional Aspects

Promoting new links between the education system and working life is a central element of the reform.

5.14 Effect on the Labour Market /Responsiveness to the Labour market

The reform aims at a better fit between the training given in vocational schools and labour market needs.

Furthermore, the enterprises themselves contribute to the definition of the qualification profiles.

5.15 Dominant Dimensions

The dominant dimension of the reform is the co-operation that has been set up between various partners in order to construct a vocational education system more congruent with working life.

5.16 Additional Comments

Such congruence could improve students' self-concept if the qualification and training profiles were not so far removed from the mission of school. In fact, school trains students in basic competencies that will allow the young worker to progressively and purposefully adapt themselves to their working environment.

Qualification profiles in fact define what an experienced worker does and what competencies a given job requires.

6 Conclusion

The world changes more and more quickly while school changes slowly. The gap between social and educational realities threatens to grow wider and wider. It is thus all the more essential to adjust training to the rapid changes taking place in society.

On the vocational track, the students have behind them a bumpy ride through school. They come in most cases from a social and cultural environment that has offered them little stimulation. The development of their personality has been undermined by repeated disparagement and a sharp sense of rejection. Such are some of the characteristics of the young people in vocational education. (Roosen, s.d.).

The definition of qualification and training profiles will not resolve all the problems. It should be accompanied by a large-scale structural reform. School must change. It should be given the means to do so: strategies, financial and human resources.

What should be changed, so as to meet the needs of tomorrow's society, are structures, contents, methods, qualification and certification procedures, continuing training of teachers, the norms of total quality.

The educational reform should absolutely be accompanied by the promotion of social and cultural values so as to achieve a long-term effect on the identity of the young people in the vocational education system.

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Reforms in Upper Secondary Education in Denmark

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1 Education in Denmark - An Overview

In Denmark education is compulsory between the ages of seven and sixteen. Optional pre-school education is provided from the age of six. There is also an optional year, called the 10th form, undertaken by almost 60 per cent of the youth cohort, mainly young people who are undecided about their career or course of study, or who wish to improve their general education. Of each cohort 99 per cent completes compulsory education in 9 or 10 years.

An increasing percentage of pupils complete their compulsory education at what are termed continuation schools. More than 10 per cent now attend one of the more than 100 such schools. These institutions - boarding schools - offer their pupils a different social and cultural environment. They constitute a very valuable option for young people during the maturing process - in particular for pupils with motivation problems.

At the moment 95 per cent of those completing compulsory education continue their studies in various youth ("post-16") education programmes.

The relative distribution of young people within the main sectors of post-16 education in the years 1982 and 1995 is shown in the following table:

	1982	1995
	Per cent of cohort	
General Upper Secondary Education (*gymnasium*)	26	34
Higher Preparatory Examination (HF)	6	5
Higher Commercial Examination (HHX)	6	11
Higher Technical Examination (HTX)	0	2
General and Vocational Upper Secondary Education, Total	38	52
Vocational Education	48	41
Not entering General and Vocational Upper Secondary Education	14	7
In total	100	100

The trend in the reveals an increase in the numbers of those opting for general upper secondary education at the expense of vocational education and training.

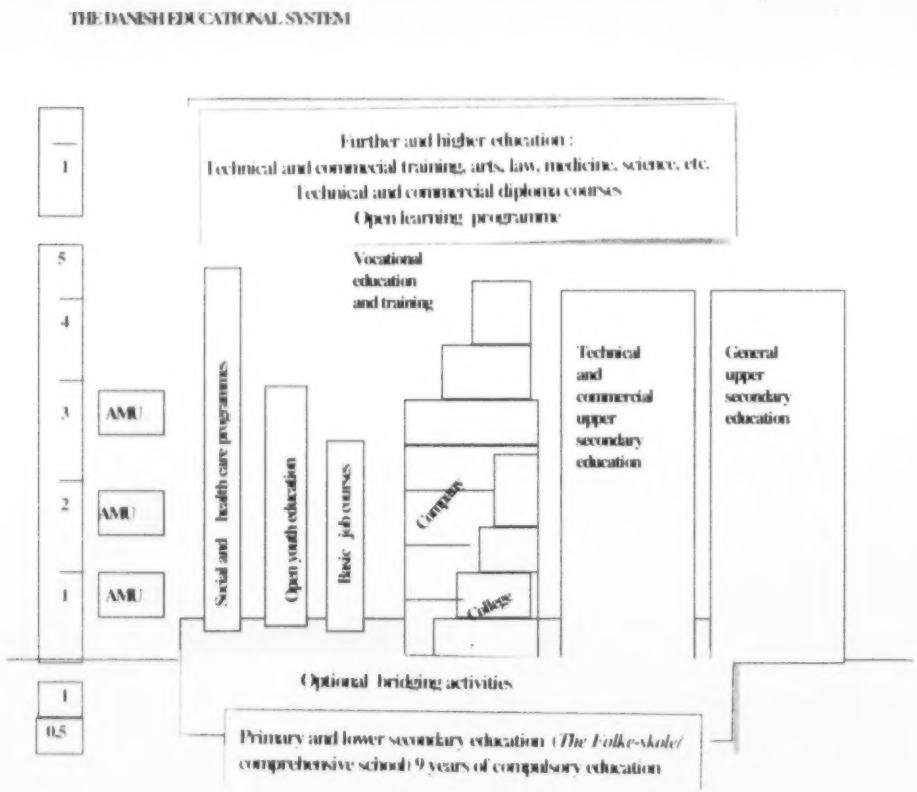

Figure 1. The Danish Educational System.

2 The Danish Post-16 Education System - How to Understand the "Systemic Logic"?

A major challenge in comparisons between different educational systems are attempts to find patterns of structural and functional similarities and differences, allowing a kind of grouping of the systems into "families". How, then, can one understand the Danish youth education system?

Even from a Danish perspective it is difficult to see the logic of the system - possibly because of the fact that it is not at all logical. One way to gain a deeper understanding of the "system" is to analyse it by means of a structural-genetic approach where the point of departure is a careful observation of existing structures which are then traced backwards in time to the historical, political, social and cultural situation where they were born.

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On the basis of this analysis the Danish post-16 education system can be characterised as still showing the marks of three main traditions:

1) the academic or "Latin" school, in the form of a modern three-year optional upper secondary school (*gymnasium*, in Denmark existing in four different forms: the general upper secondary school, the technical upper secondary school, the commercial upper secondary school, and the HF);
2) the apprenticeship system based on the old principles of master-apprentice learning in the form of a vocational training system organised on the lines of a dual system;
3) the plethora of "free schools" which also offer vocationally oriented instruction.

It is a striking fact that Denmark differs from the other Nordic countries with regard to the position of VET programmes in the total configuration of youth education schemes. Whilst the other Nordic countries, to a quite high degree organisationally, have implemented 12-year schooling for all - the "*videregående skole*" in Norway, "*gymnasieskolan*" in Sweden, combination studies in Finland, all with increasingly individualised and flexible programmes carried out within existing and familiar educational structures - it is notable that in Denmark the various types of education and training have been differentiated in an increasingly systematic manner. That is, as a result of a number of new legislative initiatives undertaken in the nineties with the aim of increasing flexibility (Bridge Building, Education for All, etc.), Danish students can choose between a number of different forms of school and tradition which they can today combine in a multitude of ways, and they can vary quite substantially the time that a training programme is to take.

Thus, there is a cultural tradition in Denmark of great diversity in the system of education and training, based on a Grundtvigian free-school tradition, which means that the market mechanism regulates the allocation of public resources, depending of how the young people "vote with their feet".

To sum up: the Danish vocational education and training (VET) system can be described as a cultural bridgehead between the European (German) dual apprenticeship systems and the school-based models of the Nordic countries. The system is a further development of the apprenticeship principle, and there is more theoretical teaching (more time spent at school) in the Danish VET system than in German VET programmes, and, conversely, far more practical in-company training than in the Swedish system, for example (15% of teaching time as compared to between 60-75% in Denmark).

3 The 1989 VET Reform

January 1991 saw noticeable changes in the basic vocational education and training system in Denmark. The statutory basis for the reorganisation of VET consists primarily of the Vocational Schools Act (Act 210, 1989) and the Vocational Education and Training Act (Act 211, 1989).

Act 210 forms the overall framework for the management, financing and other activities of vocational schools. Their position as institutions has been redefined and a far-reaching decentralisation of powers has taken place so that the vocational schools now have much more autonomy. The approximately 125 schools are now, at the end of

the 1990s, not only VET schools providing educational programmes but tend to also operate as technology centres free to provide a broad range of services to local and regional companies.

Act 211 regulates the approximately 90 VET programmes on offer in Denmark, all of which are structured as "sandwich" courses, with the students alternate between periods of school-based study and periods of practical work experience in a company. A principal objective of VET policy in Denmark is that youth VET programmes should offer genuine opportunities for continued training. They must also be able to cater both for young people who choose youth education delivered in the upper secondary schools and for those who choose youth training in a trade. Furthermore, the programmes must provide both general education and vocational training. Thus, the periods of teaching at a vocational school are not aimed solely at giving students technical and vocational competence of a narrow occupational scope. Each school is committed to offering a broad range of optional subjects that make it easier for a student to acquire an understanding of the development and structure of society. One sixth of the total teaching time is allocated to such subjects.

VET programmes are generally no longer than four years. The duration of their school-based periods does not normally exceed 80 weeks. Two-thirds of the training period is spent in practical on-the-job training in one or more companies that have been approved by the relevant Trade Committee as a place for practical work experience for the programme concerned. The student must sign an apprenticeship contract with the company before the practical training can start.

The Danish system of vocational education and training has three important characteristics which have been enforced in the VET reform of 1989:

- It is based on the principle of alternance between school-based periods and periods of practical work and learning in enterprises;
- It provides not only vocational or occupational skills, but also transversal and general skills. Besides, the system is flexible, allowing different access routes and transition between study lines; and
- The social partners exert a comprehensive influence on the system, being involved in it at national, regional and school level.

4 The Overall Configuration of the Danish VET System

The central agents forming the Danish VET system are the social partners and the state operating in a tripartite structure. It has often been argued that the labour market organisations, that is the sectorial Trade Committees, empowered to establish VET courses, are setting excessively high qualification standards. It may also be argued that their approach is too narrow in scope, concerned only with their own familiar segment of the labour market. Although the Danish VET system is good at identifying new skill demands, and efficient in translating such demands into new programmes and new learning practices, it has not yet proved dynamic enough to cope with the major economic restructuring of recent years.

The sectorial nature of the concerns of the Trade Committees means that they do not always address the educational needs that arise in the emerging service and

information society. A former Minister of Education, Mr Ole Vig Jensen, has argued that in their measures for renewing vocational programmes the Trade Committees are limited by a narrow and egoistical perspective.

With a view to making the VET system more dynamic, the 1989 VET reform involved the deliberate creation of self-regulating mechanisms - within which the social partners make their own decisions - which would provide employers with as many qualified workers as possible, and employees with the right skills to sell in their respective segments of the labour market. Although the system has turned out to be efficient, from a societal point of view there is an increased risk of social exclusion. The 1989 reform has led to high drop-out rates particularly in technical schools.

The Social Commission, appointed by the Minister of Social Affairs in the early 1990s, has also discussed the problems of social exclusion of young people, finding that there is a need for a vocational programme that would guarantee that the less school-oriented students will also be able to enter the labour market. This led to the EGU (basic vocational programmes) Act, which took effect on 1 August 1993. This is a framework act which makes it possible to organise programmes according to the wishes and abilities of the individual student. A basic vocational programme takes two years to complete and consists mainly of practical training - only 20-40 weeks have been set aside for theoretical instruction. A major disadvantage of the EGU programme is that the social partners do not take part in it, as the scheme is run totally by the municipalities.

5 Main Targets of Youth Education Policy in Denmark in 1993-1998: Education for All

The VET reform of 1989 was intended to meet many of the needs of the Danish labour market - and some successes have been achieved. However, in order to tackle the problems of increased social exclusion, particularly dropping-out problems in youth education, a new political focus was established with the change of government in 1993. The Minister of Education felt that it was still possible to come closer to the aim of the Government - that more than 95 per cent of all young people shall complete an upper secondary education, qualifying them either for further studies or for work.

In all parts of Europe, the problems that young people face while they make the transition from compulsory school to youth education/training and/or the workplace tend to arouse increased attention. Although this transition phase has probably always meant a decisive break, it has now, on account of the high rates of youth unemployment, become far more difficult than before.

Since 1993, the overarching goal for educational policy in Denmark has been the provision of education and training to all young men and women, with an ambition to reduce the rate of dropping out of education and training to 5-10 per cent from the 1993 rate of some 25 per cent.

In November 1993 the Minister of Education therefore submitted to the Parliament a plan describing how this goal could be achieved. The basic philosophy behind the plan, Education for All, was that in order to ensure that practically all young people would complete an upper secondary education the system had to offer a broad range of programmes attractive to and suitable for the young people. It was furthermore

considered important to make their transition from compulsory schooling to upper secondary education and from one programme to another easier. There had to be possibilities for the less gifted and there had to be a high degree of flexibility in the system, allowing students - within certain limits - to construct their own programme. Finally, according to the plan it was essential that guidance efforts were intensified on all levels, making it possible to follow each young person throughout his or her education and for a while after its completion.

The general objectives of the action plan were the following:

- The pupils/students should be brought into focus;
- All young people should be provided with an educational challenge;
- All types of youth education should develop the personality and creativity of the students;
- The educational system should make possible individually arranged educational progression; and
- The development of school management and teaching should be stimulated through experiments and developmental projects at the schools and through staff training.

Most of the plan has now been implemented. One of the most interesting innovations in the plan was what was called Open Youth Education. It constitutes a basically two-year programme personally designed by the young person, consisting of modules from existing programmes, possibly combined with periods of work and travel abroad. Depending on the composition of the programme, it may give access to tertiary education. The implementation of the Education for All plan is being monitored and evaluated by a research project, but already several beneficial effects of the plan can be seen.

At a follow-up meeting to the 1993 OECD examination of the Danish educational system in April 1996, the OECD expressed its appreciation of the actions and measures undertaken by the Danish Ministry of Education.

The overall target of the plan has been to create a more flexible, efficient and student-centred system of youth education in the years up to 2000.

There has thus been a distinct adjustment in Danish youth education and training policy with the aim of making the transition from the lower secondary school to youth education and training programmes easier. The principle applied has been the differentiation of education/training, and the system has been augmented by the further integration of the wide range of independent schools (free schools) which also offer education in this area both during the transitional phase and in the youth education/training phase.

Education for All can be seen as a preventive strategy. The aim is to stimulate success in youth education and safeguard young people against unemployment by means of educational innovation.

To sum up: Whereas the trend in Denmark has been marked by the creation of entirely new educational structures, the other Nordic countries are introducing more flexibility and several combination options within the well-known frameworks of the existing structures.

6 Outcomes of the Education for All Programme

In the late 1990s there is again a new agenda for prioritising educational policy aims in Denmark. The main point of the eighties was to increase the responsiveness of the VET system to the qualification needs of the labour market. In the nineties the overriding priority has been to make more room for the individual in the system. A new balance will have to be found in the next two years between two dimensions, educational quality and economic efficiency.

What have been the results of the Education for All policy (the UTA plan)? Firstly, in Denmark there is now a highly diversified youth education system with many options for the individual student. In particular, new flexible and relatively attractive programmes have been developed for the less gifted student groups. This has been a success as is shown by the rate of young people's participation in education.

Secondly, the youth education system is very complicated and highly individualised. It is transparent neither to the users nor to the companies. There are educational programmes, such as the EGU and the FUU (free youth education) which lead to unclear competencies. The FUU courses are created by the students themselves without any involvement of the social partners. The EGU courses are also outside the ordinary VET programmes and do not confer on the student any recognised qualifications. Consequently, those taking such programmes will not receive recognition from the main parties that regulate the demand and supply of labour. Quite simply, these two programmes are based neither on any national occupational standard nor on any nationally approved educational standard.

Thirdly, the UTA plan has led to a vast internal renewal of the vocational education and training programmes in terms of pedagogical innovation, guidance and counselling, the development of attractive school environments, and the integration of information technology into VET, making possible more flexible and student-centred learning environments. Campaigns have been undertaken against dropping-out in vocational education and training. New approaches to teaching based on a shift of focus from teacher to learner have been implemented. "Practice enterprises" have been set up in vocational schools. Further, representatives of the local labour market have been involved in designing the curriculum.

Fourthly, a number of important initiatives have been implemented to smooth young people's transition from compulsory school to youth education, such as presentation courses, bridge-building activities, youth guidance in all municipalities, and orientation modules at the start of initial VET programmes.

Fifthly, the overriding challenge to the youth education system has been confronted with success: the dropping-out rates have been reduced by 50 per cent during the 1990s. It should be noted that this positive result has been achieved at a price: because they frequently change their study programmes and display a tendency to collect overlapping qualifications, young people clearly spend too much time in the youth education system.

Sixthly, the challenges related to parity of esteem between general upper secondary education and vocational education and training have not been solved in Denmark - in fact, they may even have been aggravated. While the general upper secondary school *(gymnasium)* has remained stable and represents continuity, the extreme innovative activity around the vocationally oriented programmes has created a caleidoscopic variety of such courses. Among the post-16 programmes the general upper secondary

education provision stands out as a well-known and attractive option for pupils (and their parents!) leaving compulsory school at the age of 16.

Seventhly, during the last five years a great deal of resources and energy have been invested in the creation of educational diversity and differentiation through the establishment of new programmes. It may be argued that the approximately 90 ordinary initial VET programmes leading to qualifications as a skilled worker have been drained of much-needed innovative thrusts and money to make the new programmes more attractive to young people. The focus has been very much on constructing alternative programmes appealing enough to attract the attention of the academically weaker groups of young people and persuade them to stay on in education.

7 The Political Agenda in Danish Post-16 Education Policy in 1998

On 24 March 1998, following a national election, a new government was formed in Denmark, based a centre-left coalition between the Social Democratic Party and the Radical Left (a centre party). Amongst the new Government's political commitments is one to improve education as a prerequisite for developing human resources, competitiveness, welfare and an active democratic society.

The Government intends to exploit better the resources already available for education by improving the use of existing input factors. In youth education and training the Government will make a serious effort to strengthen the quality and relevance of vocational education and training programmes so that vocational schools may become more popular amongst compulsory-school leavers. This policy will be underpinned by the streamlining of study options for the 16- to 19-year-olds. Employers will have to ensure the availability of a greater number of ordinary training places within the dual system in order to effectively support the alternance principle, a basic value in Danish VET which is endorsed by all stakeholders.

A growing number of young people start in the general upper secondary track (the gymnasium), but many later move to vocational schools. Guidance efforts will therefore be intensified, and the various measures to counter the still high drop-out rates in youth education, which date back to the Education for All plan of 1993, will continue.

The main policy goals in post-16 education in Denmark is a sharper focus on "employability" - the structure of educational provision for young people must lead to recognised qualifications.

Another central factor is that some cleaning up is necessary: the system must "go back to basics" in the sense that the new separate programmes established in the nineties (the EGU scheme and the many "bridge-building" activities) will be integrated into the ordinary structures of the mainstream system - that is, flexibility and individualisation must be increased within the traditional VET programmes as has been done in the other Nordic countries.

A third reform initiative will involve making VET provision more coordinated and transparent. A new proposal for a reform of initial VET provision covering the technical VET programmes has just been tabled. There will be markedly fewer and broader admissions channels into the VET system. Today there are 90 different VET programmes from which young people leaving compulsory school must make their choice, which makes the process much too complicated. Built-in mechanisms will be

created so that young people may achieve a double qualification in the technical VET programmes, being a vocational qualification combined with a qualification giving access to higher education (as in the "flexible programmes" in Finland). Students will also be given an option of leaving the VET system with a "partial qualification" if they are not able to meet the requirements of a full skilled-worker qualification (as is also possible in Norway).

There will be added emphasis on assuring the quality of VET schools and programmes in the coming years. This is a function also of the radical decentralisation which took place in the 1990s. A new evaluation centre for youth education will now be established and quality-control programmes operating in the VET sector will be intensified. Denmark is ahead of other European countries in having a national quality programme for its VET schools that requires each school to have a quality assurance mechanism. However, the existing measures have focused on the input side, on "front-loading"; at the same time the philosophy guiding them has been one of promoting internal quality-control initiatives. There seems to be no doubt that transnational benchmarking will be introduced and external auditing adopted in the coming years.

High on the educational policy agenda is a radical reform of the institutional configuration of Danish education. The institutional provision structure of tertiary education in Denmark is characterised by many small institutions spread across the (small!) country. Today there are 195 tertiary education institutions, of which 12 are establishments operating under university legislation, while 117 offer medium-cycle (medium-length) higher education programmes (i.e. 3- to 4-year programmes preparing students for occupations such as teachers, librarians and nurses) and 66 deliver short-cycle higher education (1 to 2,5-year technical and commercial courses). Of these 195 institutions, a total of 169 offer programmes or courses in a single occupational area.

In comparison with the other Nordic countries it is remarkable that, while they have each only around 30 tertiary education institutions, with an average of 5000-7000 students each, the Danish average is only around 800. Of Danish institutions 80 per cent have a yearly intake of less than 200 students.

The policy goal of the present Danish Government, that 50 per cent of the age cohort should benefit from tertiary education, necessitates a serious discussion on whether the existing institutional framework can achieve this growth. The Danish tertiary education structure will undoubtedly be restructured and streamlined in the near future. The Minister of Education expects that the restructuring will take place voluntarily within the next 5 to 7 years on the basis of the institutions' own interests. However, incentives will also be used to promote the required mergers. A heated discussion has already started among the institutions. It should be noted that the Danish VET schools will be very much involved in this process as they offer a number of tertiary study programmes.

Also, as from 1 September 1998 there will be far-reaching administrative changes in the Ministry of Education. Institutions ("supply") and educational programmes ("demand") will be separated, the VET Department will be closed down, and the educational programmes offered by the VET schools and hitherto administered by the VET Department will be placed under four new departments in the Ministry of Education. Sectoral monopolies are now being broken down and replaced by open competition.

8 Conclusion

The Post-16 Strategies project has focused on reform programmes with the specific objective of achieving parity of esteem between academic and vocational education. The project has defined a number of common Western European objectives:

- to raise levels of attainment;
- to enhance opportunities for lower-attaining and less advantaged students;
- to increase the attractiveness of these opportunities, and to promote parity of esteem;
- to improve progression opportunities;
- to modernise the curriculum and to promote general skills and knowledge, including key or core skills;
- to promote equality;
- to decentralise the system and to increase its flexibility and responsiveness; and
- to rationalise the system and to make it more transparent.

The Danish efforts to reform upper secondary education also pursue these objectives. In the Post-16 Strategies project four reform strategies were defined: vocational enhancement, mutual enrichment, linkages, and unification.

The dominant strategy in Denmark is based on vocational enhancement, involving an attempt to enhance vocational education, and make it more attractive to potential students, through measures which maintain and strengthen its distinctive ethos and its separateness from general education. However, in Denmark as much as elsewhere, the reform initiatives include elements of different strategies, and the demarcation lines between these different strategies are not particularly sharp.

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Estonian Educational System: An Overview and the Estonian Approach to Upper Secondary Education

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1 Basic Data

Geographic area:	45,227 km^2
Population:	1,462,130 (1995)
Urban population:	69.8%
Age Structure:	0-14: 20.7% 15-24: 14.25% 25-44: 28.5% 45-64: 23.5% 65+ 13.1% (1995)
Ethnic profile:	Estonians (64.6%); Russians (28.5%); Ukrainians (2.6%); Belorussians (1.5%); Finns (0.9%); other (1.9%).
Languages:	Estonian (official language), Russian
Unemployment:	(ILO definition): 10.2% (fourth quarter in 1996).

2 Historical Overview

Cathedral and monastery schools (teaching in Latin) were established in Estonia in the middle of the 13th century, municipal schools (similarly instructing in Latin) in the 15th and 16th centuries. Estonian peasant schools were founded in 1689. Each parish had its own school.

In 1630 the first secondary school was established in Tartu, and in 1631 another was built in Tallinn. The Academica Gustaviana (Tartu University) was founded in 1632.

In the 1780s Estonia had a literacy rate of 40-50%. In the beginning of the 19th century it was possible to speak about a stable school system. According to the 1887 census, 78% of the whole population could both read and write, while 96% could read.

When the tsarist government introduced its Russification policy in the Baltic in 1880, all schools were required to teach in Russian. The independent Republic of Estonia (1918-1940) introduced Estonian-language primary, secondary and tertiary education in 1919. Primary education was free and compulsory from the age of 7 to 16. Vocational schools were also established at the same time.

After the occupation of Estonia by the Soviet Union in 1940, the same Soviet educational system became compulsory for all Soviet republics. Most textbooks were translated from Russian into Estonian. In schools both languages - Estonian and Russian - were used. For Estonians the first foreign language was Russian - and it was compulsory. Russian was called by educational authorities the "second mother tongue".

But - despite the pressure to adopt the whole overpoliticized Soviet educational structure and its curricula, the Estonian educational system retained instruction in Estonian - and this on all levels of the system, including university. Estonia also had specialised schools (specialised and experimental classes), where the students learned some subjects (foreign languages, art, music etc) in greater depth than was usual in the general schools.

In 1987 Estonia tried to establish an independent national Estonian educational system as a school experiment inside the Soviet educational system. Changes in education started at this time. Luckily for us, in 1991 the Soviet Union collapsed and after that Estonian education must now find its own way.

3 Structure of the Educational System

The current system of education in Estonia (see Figure 1) covers pre-school education in kindergartens (ISCED level 0); general comprehensive schools and general upper secondary schools (*gümnaasium*); vocational education; and higher education at universities and institutions of applied higher education. For handicapped children there are special comprehensive and upper secondary schools.

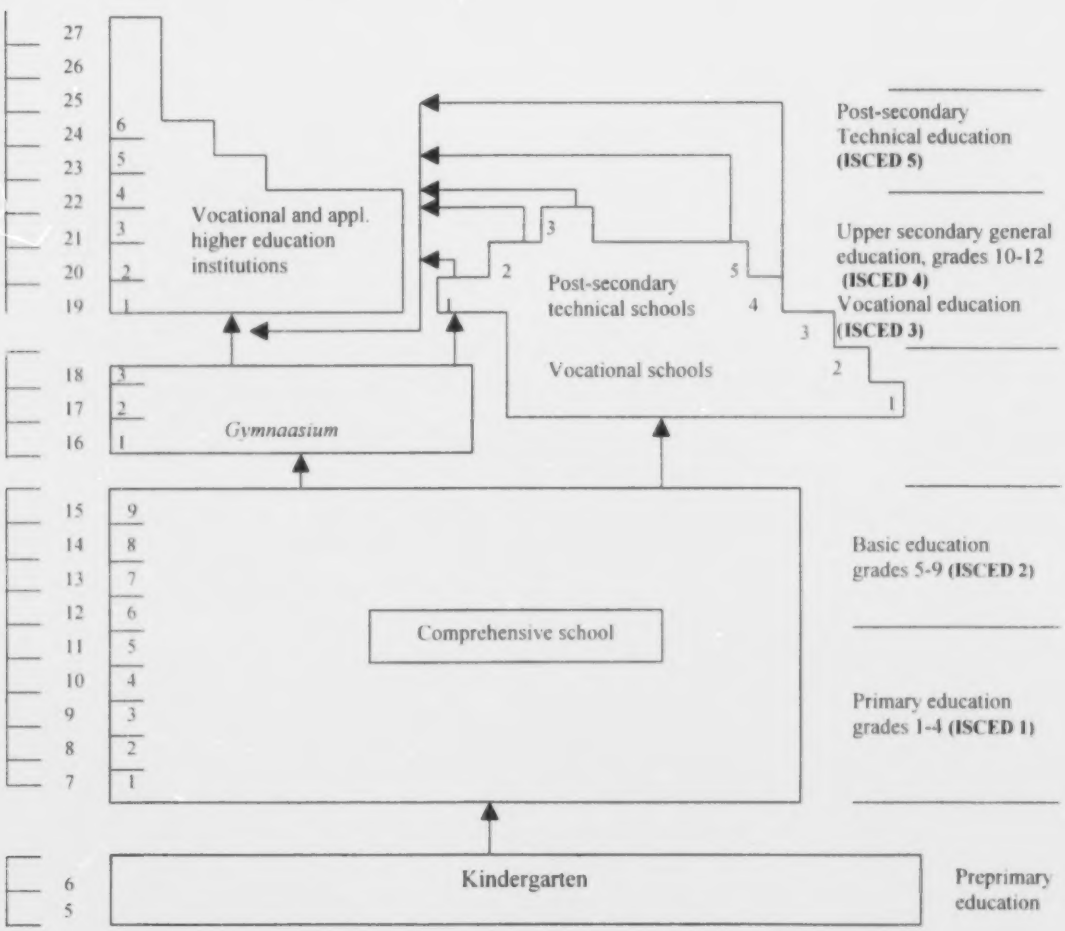

Figure 1. Estonian educational system and the ISCED level categories.

According to the Education Act, a child is obliged to begin attending school in the year when he or she will have turned seven by October 1. The Act makes education compulsory until the student reaches the age of 17 or graduates from the comprehensive school. The comprehensive school covers categories 1 and 2 in the ISCED classification. After graduating from the comprehensive school a young person has the opportunity and obligation to decide whether to continue his or her studies at a school which offers upper secondary general/academic education (*gümnaasium*) or at a vocational school. Students at the upper secondary level of education (whether vocational or general) are typically between ages 15 and 19. The education delivered at an upper secondary school is equivalent to level category 3 in ISCED.

Post-secondary technical schools, the higher level of vocational institutes, have programmes lasting two and a half years for those who have graduated from a upper secondary education programme (i.e. upper secondary general education or vocational education), and about 5 years for those who enter after graduating from the comprehensive school. Both levels of vocational education are often offered in the same building in order to make the best possible use of the investment necessary for equipment and for the maintenance of the building.

Higher education is divided into:

- applied higher education;
  diploma programmes (4- year studies, ISCED 6)
- academic higher education;
  bachelor's degree (4-year studies, ISCED 6)
  master's degree (2-year studies, ISCED 7)
  doctorate (4-year studies, ISCED 7)

There are two types of higher education institution in Estonia:

- universities, offering academic higher education and diploma programmes;
- applied higher education institutions, offering diploma programmes.

The requirements for each educational category are determined in a national curriculum. The national pre-school education curriculum is approved by the Ministry of Education and the national curricula for basic and secondary education by the Parliament. The requirements for vocational education curricula are approved by the government, while occupational standards are designed by employers' organisations, and the occupational curricula based on the occupational standards by working groups and coordinated by the National Examination and Qualification Centre and the Estonian Chamber of Commerce and Industry.

The structure of the educational system and the national curricula give everyone the opportunity to move from one level of the educational system to another.

The central government and the local authorities guarantee everyone, in accordance with prescribed conditions and procedures, the opportunity to complete their compulsory education and continue their studies and to acquire an Estonian-language education at all levels of the educational system, including non-Estonian lower secondary schools and ethnic groups.

A preprimary institution is an establishment providing care and pre-school education for children below school age. It can be a creche, a kindergarten, a special kindergarten, a day-care centre, or a children's centre. Such an institution can also be united with a primary school.

The comprehensive school and the (general) upper secondary school (*gümnaasium*) form a unified school where each year of study (grade) is directly based on the previous one, enabling an unimpeded transfer from one school to another.

Basic education is the compulsory minimum education, acquired in a comprehensive school (grades 1-9) , where the student fulfils the compulsory school requirement.

Primary schools (grades 1-6) and combined kindergartens and primary schools may be established if circumstances require it (e.g. creating better study conditions, ensuring the availability of education in rural areas, answering the needs of students and parents). After basic education has been acquired, studies may be continued in secondary education, either in a general upper secondary school (grades 10-12) or in a vocational institution.

According to the Education Act, general education is provided by the following types of school: combined kindergartens and primary schools, primary schools, comprehensive schools, upper secondary schools (*gümnaasium*) with comprehensive-school classes, and comprehensive schools and upper secondary schools operating as single institutions.

Educational institutions are financed by their owners: the state - the Ministry of Education - and the municipalities. Finances are calculated according to the number of students and depending on the level of the educational system.

In Estonia upper secondary school teachers are educated at the Tartu University and the Tallinn Pedagogical University and comprehensive school teachers at the Tartu Teacher Training College and the Tallinn Pedagogical College. In-service training of teachers takes place in the same institutions.

4 Situation in Education Today

All these 50 years all educators - administrators, decision-makers, and teachers - took existing educational arrangements and regulations for granted. That is, all was easy and clear. Now everyone must make personal decisions and accept responsibility. It is a very serious change and time is needed to assimilate it.

All educators are convinced that the Estonian educational system needs to be changed: things must be done in another way. But at the same time there is a feeling that those changes must be brought about by other people, not by themselves: they want to go on acting as before, relying on their sound and long experience. This is the dilemma.

The Estonian education and training system consists of compulsory basic education (grades 1-9; children generally begin school at the age of 7), followed by upper secondary education (either at a general upper secondary school or a vocational school). Here is the most important problem - after completing their basic education students have only two possibilities for continuing their education, and in this situation the vocational track is very unpopular. The general track opens access to higher education

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(at university or at an applied higher education institution), while the vocational track offers post-secondary education at technical schools.

The most important problem is how to solve the disproportion, at the upper secondary level, between upper secondary general education and upper secondary vocational education enrolment: comprehensive (compulsory) school leavers go to the general upper secondary schools (approximately 70% in the country as a whole, more than 85% in Tallinn, our capital. Vocational schools are very unpopular, their prestige is very low. Changing such attitudes among the parents is a hard task - it is a psychological problem: my child must go to the *gümnaasium*. But this is the academic track and there is no what is known as preprofessional or prevocational education in these schools. Thus, after finishing the general upper secondary school the students are not ready to enter the labour market.

The other problem in vocational education has been the location of vocational schools in large towns and the continued existence of courses which are no longer needed (because they are too heavily industry-oriented, use outdated technology etc).

This is the reason why Estonia, a new partner, is interested in the SPES-NET cooperation project. We are sure that it is not possible to transport the educational system of some other country to Estonia, but we need the experience of others to decide how to develop the Estonian educational system: we must learn from the mistakes of others because we have not had time to make our own mistakes.

Another problem for Estonia is how to explain to the educational authorities - the decision-makers - what kind of political decisions must be made to change the Estonian educational system. The first important decision must make it clear that upper secondary education may include a greater number of possibilities that just one - an academic *gümnaasium*. Inside the upper secondary school it is possible to follow different curricula - more vocational or academic, more specialized or more general. After that it is possible to take further steps and go on.

5 Problems in Upper Secondary Education

Things might be summed up as follows:

- the prestige of vocational education has declined in relation to preparation for higher education in general upper secondary schools;
- a substantial proportion of young people are leaving school without work qualifications and even without readiness for further vocational education - basically, they have been trained for unemployment;
- the drop-out rate is too high;
- the links between vocational training at school and in industry are too weak;
- there are some geographical and social inequalities;
- there are now less educational opportunities for adults and disadvantaged students;
- educational contents and methods are not adapted to the needs of the future; and
- vocational teachers' training and in-service training.

6 What Must We Try to Do?

Our challenges are:

- to raise the status of vocational training and make it attractive to more young people;
- to integrate vocational and general upper secondary education and give to all upper secondary school leavers basic preprofessional and prevocational knowledge and skills;
- to find solutions to the drop-out problem;
- to strengthen the links between vocational schools and enterprises;
- to prepare students and apprentices for lifelong learning;
- to develop services advising teachers on teaching methods;
- to develop vocational education curricula;
- to educate vocational teachers for the needs of the future.

7 Solutions

It is not possible to transport the educational system of and the national strategy applied in a Leonardo da Vinci programme country wholesale to Estonia. Instead we must use the experience of the Post-16 Strategies project (Young & Lasonen, 1998) to try to solve our problems.

The first steps are:

- integration of Estonian upper secondary education (general and vocational), thus raising the status and prestige of vocational training;
- making upper secondary general education (common core content for general and vocational schools) an integrated part of vocational training;
- designing a core curriculum for general education;
- designing a curriculum for prevocational and preprofessional knowledge and skills;
- preparing teaching materials for such an integration of general and vocational education;
- preparing vocational teachers and students for lifelong learning - they must learn to learn;
- cooperating with the enterprises to meet the needs of the future.

Today we have started with this work and all the time we must remember that *Change is the most stable thing* and that we must move *From teaching to learning*: We must learn from the experience of others.

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Reforms in Upper Secondary Education in Greece

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1 The Context of Upper Secondary Education in Greece

A Historical Background to the Greek Educational System and Its Major Reforms

Shortly after the constitution of the first Greek independent state in 1827, the first schools of general education were established. However, vocational schools were only founded in the next century, under a law passed by the government of Eleutherios Venizelos in 1929 (Law 4397/29). Attendance at these schools was very low despite the fact that enrolment was free for primary school leavers. Law 3971/1959 constituted the first integrated attempt to establish concrete vocational education institutions: lower technical schools, apprenticeship schools, as well as schools for assistant engineers were created.

In 1964, an Education Act (also covering upper secondary education) passed the Greek Parliament - it was mainly an aspect of social, political and economic post-war reforms aiming at making possible the overall development of Greek society. Although the 1964 reform introduced free access to education for all, compulsory nine-year education and changes in the curriculum regarding language, ancient Greek and so on, it came into full force only after 1974, following the seven-year dictatorship and the restoration of democracy. Curricula and books underwent an extensive change and education was adapting to the innovating needs and potential of Greek society.

In 1977, Law 576/1977 introduced technical vocational *lykeia*, (TEL) aiming at providing alternatives to students wishing to receive vocational training. Apprenticeship schools were upgraded from lower- to intermediate-level institutions. From 1977 onwards, vocational education was officially integrated into the Greek upper secondary education system. The establishment of vocational education marks the first step by the Greek state in an attempt to achieve the democratisation of society.

Law 1404/1983 provided for the further upgrading of the foundations of higher technical education and training (KATEE) to technical education institutes (TEI), for the first time representing tertiary education, but still inferior to technical universit-ies. Another type of *lykeion* trying to combine general and vocational education was also founded by Law 1566/1985 and was called comprehensive (*polykladikon*) *lykeion* (EPL). Finally, institutes of vocational training (IEK), representing post-secondary education, were established by Law 2009/1992 (Patiniotis et al., 1997). The IEK are non-graded post-secondary institutions offering vocational education to *lykeion* graduates who have not managed to continue their studies into tertiary education.

So far, the Greek educational system has offered broad but general knowledge in order to prepare students for higher education; this is mainly due to the fact that Greece has always been a country with little industrial activity, thus requiring no more than a small number of workers with low-level qualifications. The Greek educational system has often been characterised as "one-dimensional" because it offered no alternatives to

students who wished to follow a vocational path different from the mainstream leading to a university degree (Tsoukalas, 1979; 1986). That is, all students had been obliged to follow the same programme of studies, irrespective of their capabilities, vocational ambitions and prospects (Delmouzos, 1971). According to a broadly accepted view, the one-dimensional character of the Greek educational system, which aims at the preparation of students for university, explains the long-standing malfunction of the system (Mylonas, 1982). Students' orientation to general education has its origins among other things in the fact that most professions in Greece are learned on-the-job (Patiniotis, Spiliopoulou & Stavroulakis, 1997).

B *Objectives of Upper Secondary Education - Access to Tertiary Education and the Labour Market*

The most important problem in Greek upper secondary education is the gap between general and vocational education. As regards the social, cultural and economic aspects of the problem, the majority of young upper secondary school graduates pursue a university degree. They do not even think of satisfying their aspirations through vocational/technical education unless they fail at the university entrance exams and come from low social strata. As a result we are experiencing an "overdose" of university-degree holders occupying a high proportion of the positions available in the public sector and on the labour market. The rate of unemployment is steadily rising and the phenomenon of "hetero-employment" is frequent, that is, people practise an occupation completely different from that for which they received vocational education and training. A large number of university-level graduates are engaged in a profession other than the one they have been educated for.

The magnitude of the problem becomes easier to perceive if we look at the 90,000 general upper secondary school graduates per year who are neither qualified to practise an occupation nor, as regards the majority of them, able to gain admittance to a tertiary education institution due to the limited number of places available (*numerus clausus*).

Vocational education is thought to be for those who fail in the school system. The families of most *lykeion* graduates wish that their child will enter a university. It is also necessary to take into account the fact that the lower classes are not prejudiced against higher education. On the contrary, many young people of humble origins enter higher education and become successful professionals; in the post-war period over 40% of students in university or higher technological education have been of rural or working-class origins (Celorrio, Miquel & Patiniotis, 1997).

The reasons for the above-mentioned situation can be summarised as consisting of cultural and objective factors. The *cultural reasons* are related to the wish of most parents to help their offspring progress in learning, the latter being closely associated with a "respectable profession", as well as with a higher social status. In this respect, parents are willing to pay a great deal of money to private tuition foundations in order to prepare their children for the panhellenic General Examinations (university and college entrance examinations) or to send them abroad to study in a foreign country. The *objective reasons* for students' preference for general over vocational education have to do with the labour market organisations. Admittedly, the skills generally demanded on the labour market tend to be rather low-level, hence not rendering necessary a prolonged vocational training; instead of on-the-job training often suffices. Accordingly, the salaries received by vocational education graduates tend to be rather

low, and the social status of technical occupations is still rather inferior. Although student intakes into vocational education tend to increase, they still lag considerably behind those seen in general education (Laboratory of Sociology and Education, 1998).

In the field of occupations in Greece we are today experiencing a situation in which a person

- practises an occupation because they have been trained in it;
- has been trained in a certain occupation but practises a different one; and
- has not received any kind of VET at all.

There is a gap of a kind between the educational system and employment (Pesmazoglou, 1985; Patiniotis, 1996). In its endeavour to modernise both the Greek economy and Greek society, the post-war state was influenced directly and indirectly from abroad (the World Bank, the big western countries etc) and formulated the present VET structure without any prior demand from society or from the private sector of the economy (Patiniotis & Stavroulakis, 1997). Enterprises are interested in recruiting a cheap workforce, thus reducing production costs. The majority of Greek small enterprises are not willing to pay more for well-qualified employees. On the other hand, the economy does not require a large highly skilled workforce (Patiniotis, 1998). Although this may sound strange, a typical Greek enterprise tries to become competitive by paying low wages and offering its workforce on-the-job training. This explains why, until recently, in spite of innovations in the *lykeion*, VET reforms have been overlooked. The Government is not under any kind of pressure regarding the transition from general/academic to vocational education.

2 Reforms in Upper Secondary Education

Greek society and, consequently, the Greek Government, have realised that any historical present is bound to be superseded; in real terms this awareness is seen in a major reform of the educational institutions, intended to reflect current economic needs and historical orientation. Given the way in which they are implemented in the Greek context, European guidelines demand a new model of upper secondary education which is called **comprehensive *lykeion (*enieon lykeion*),** intended to abolish and replace all previous forms of *lykeia*, with the exception of ecclesiastical and musical *lykeia*. By the year 2000 all the current forms of *lykeia* will be fully developed in a form and organisation offering three fields of specialisation: theoretical subjects (humanities, social sciences and languages), positive sciences (mathematics and natural sciences) and technological sciences.

In principle, the aim of this innovation is to improve graduates' access not to employment and the labour market but to universities. The comprehensive *lykeion* is a

* [Although the term **Comprehensive School (Polykladiko)** existed as a form of Lykeion, we are still using this term in order to translate the new model of **Enieon Lykeion** which is a more specialized form of the old one. Enieon Lykeion specializes in theoretical issues – the main difference lies to the fact that Enieon Lykeion seeks the best way to prepare students for tertiary education institutions. On the contrary, the former Polykladikon Lykeion's philosophy was the link of theoretical and applied fields, pursuing at the same time, students access to both tertiary education and the labour market (double function)]

form of school which, according to the Ministry of Education, contributes to the implementation of its plans for a more adequate education of prospective students.

Since this innovative linkage between general/academic and vocational education has only started to come into force, we are not in a position to describe the resulting changes in the relations on the one hand between initial vocational education and enterprises and on the other hand between initial vocational education and universities.

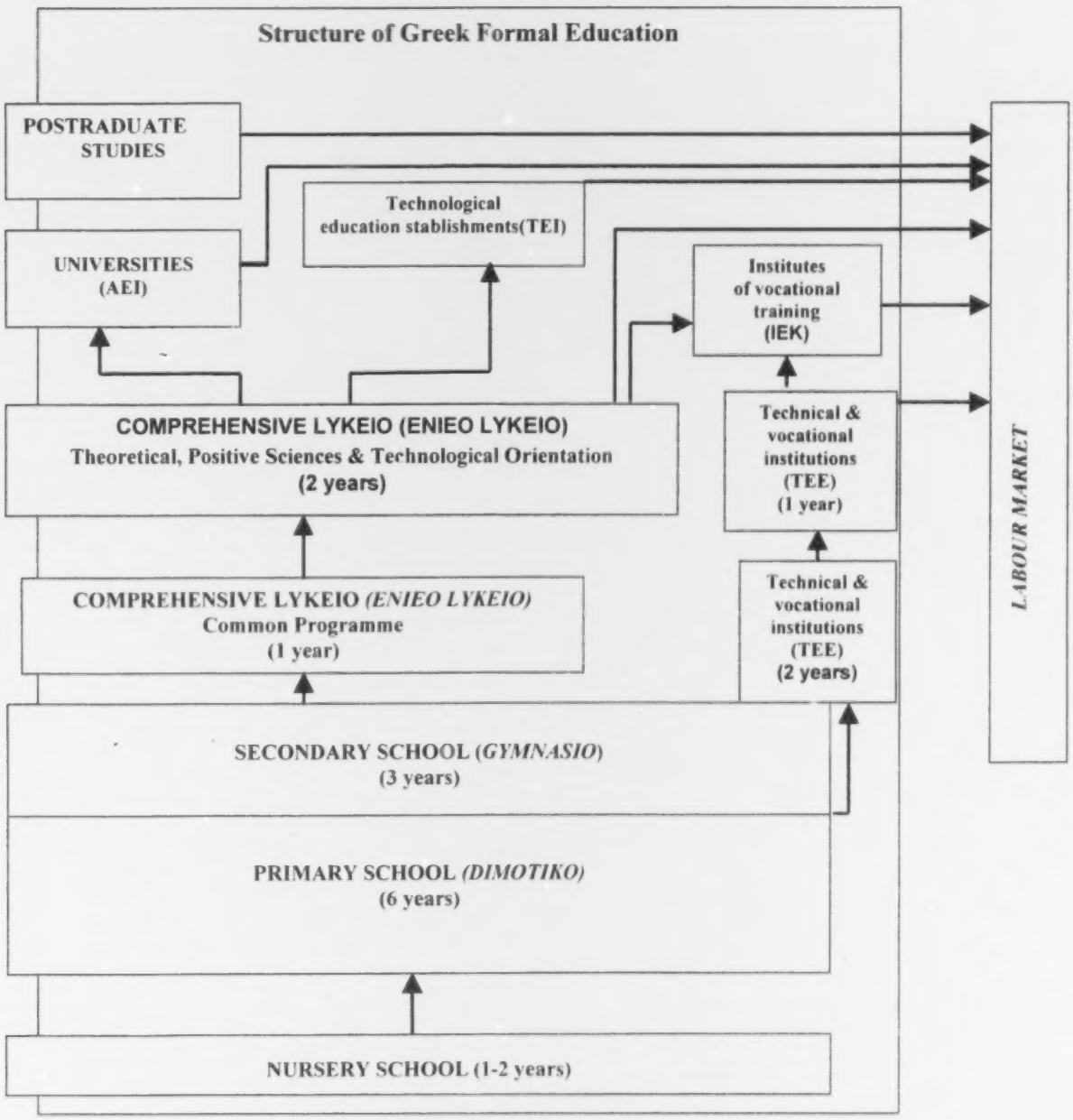

Figure 1. Structure of the Greek Formal Education System.
(Initial Source: D.Thomas,Directorate of Education, Achaia Perfecture.)

Therefore, we will restrict ourselves to a presentation of the recent reforms pinpointing, at the same time the problems and drawbacks encountered during this implementation. (Figure 1).

A Towards a Comprehensive Lykeion (Enieon Lykeion)

Law 2525/97 was passed by the Greek Parliament in August 1997 and came into force in September 1997. The comprehensive *lykeion* was launched in the school year 1997-98, with the reform starting gradually with the first year of studies. According to this law, the goals of the comprehensive *lykeion* are

- to ensure a high level of general education and help students to develop their skills so as to enable them to exercise initiative, strengthen their personality and promote their critical thinking abilities;
- to provide students with adequate knowledge in order to make them qualified for further studies on the next level of the educational system;
- to offer students the skills needed to make them capable of gaining access to the labour market after adequate specialisation or training.

The **general characteristics** of the comprehensive *lykeion* are

- enhancing the foundations of general education;
- introducing new subjects such as astronomy, computer studies, drama, modern European literature, natural resources disposal, history of sciences, art history etc;
- enhancing the role of the teachers as well as promoting collaboration and communication between students and teachers;
- instituting systematic and substantial briefing between teachers and students;
- establishing Centres for Consultation and Vocational Orientation;
- offering parents' associations more privileges and responsibilities;
- introducing new teaching methods and new procedures of assessment;
- offering students the option to improve their performance by reducing the number of examinations and of teaching hours.

B Structure of the Comprehensive Lykeion

In the first year of studies in the comprehensive *lykeion* there is a common curriculum for all students. The second year of studies introduces three orientations: theoretical subjects, positive sciences and technological sciences. In this year general subjects, common to all students, account for 60-65% of the curriculum while the optional subjects take up the rest of the time. In the third year each orientation includes courses in optional subjects. In the third year of studies general subjects cover 50-55% of the curriculum and optional subjects again take up the rest of the teaching hours.

Comprehensive *lykeion* graduates are granted a national certificate (*ethnikon apolitirion*) which enables them either to enroll in a tertiary education institution or to receive vocational training by attending institutes of post-secondary education (IEK).

Student assessment forms an integral part of the educational process. The main aim is the evaluation of the quality of the knowledge offered; another endeavour is to combine various forms and techniques of assessment in order to achieve a reliable,

objective and unprejudiced system of evaluation, thus eliminating the need for additional examinations. At the same time, innovative projects are encouraged in order to help students develop their creative and writing skills and to provide feedback on the teaching process.

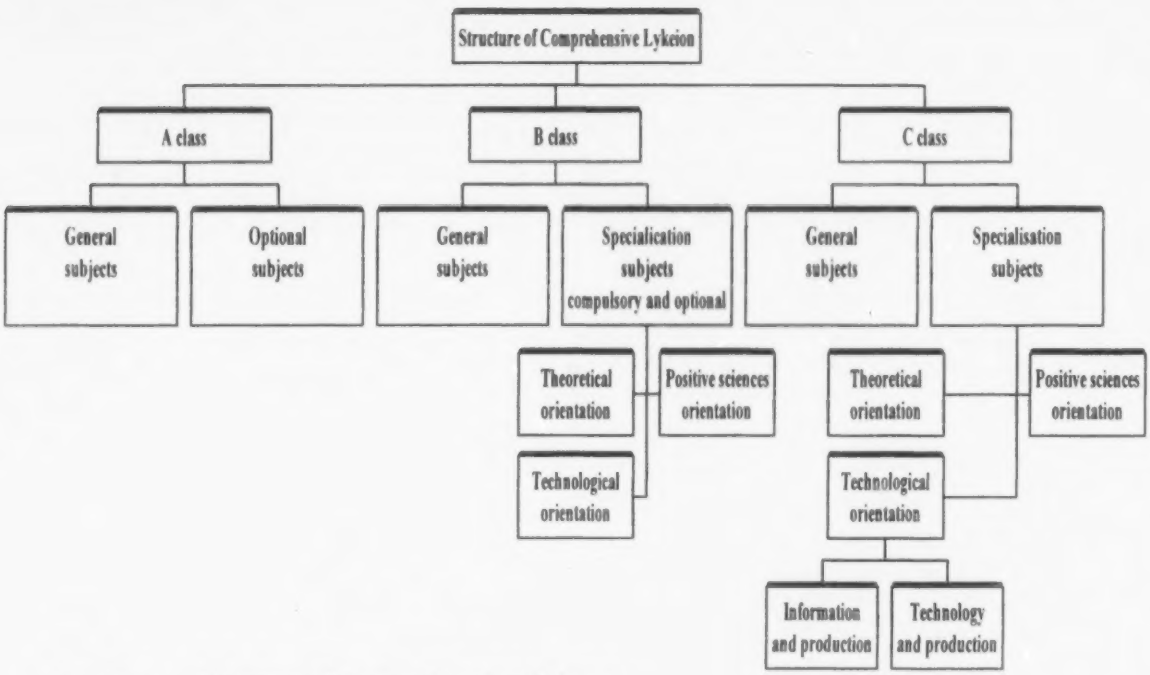

Figure 2. Structure of Comprehensive *Lykeion.* (Source: Ministry of Education.)

Another innovation of the comprehensive *lykeion* involves a programme of extra teaching addressed to students with learning difficulties. This programme started in February 1998; each school identifies the learning difficulties of its own students and organises extra teaching hours with the intention of overcoming these difficulties or reteaching the parts of the curriculum that students have not assimilated. Such remedial teaching is delivered by each school's own teaching staff, who receive compensation for the extra hours they teach. These programmes can also be run in collaboration with other schools nearby.

C Technical and Vocational Education

The new Act concerning Secondary-Level Technical and Vocational Education (June 1998) constitutes the statutory basis for a complete system of technical and vocational education within the framework of Greek secondary education as a whole. After the completion of their nine-year compulsory education, students can choose either the comprehensive form of general education (the comprehensive *lykeion*) which leads to academic studies, or the reformed and flexible form of technical and vocational

education (technical and vocational institutes) which qualifies them for entry into working life.

This new institutional context created by the technical and vocational institutes (TEE), is meant to achieve a qualitative improvement of vocational education, making it possible to develop knowledge, critical ability and various skills so as to enable students to secure flexible access into working life. It is an open system, providing a horizontal link to the comprehensive *lykeion*, offering continuous opportunities for developing vocational and general knowledge and understanding, and congruent with a configuration of conditions suitable for establishing vocational and cultural paths. (Figure 3).

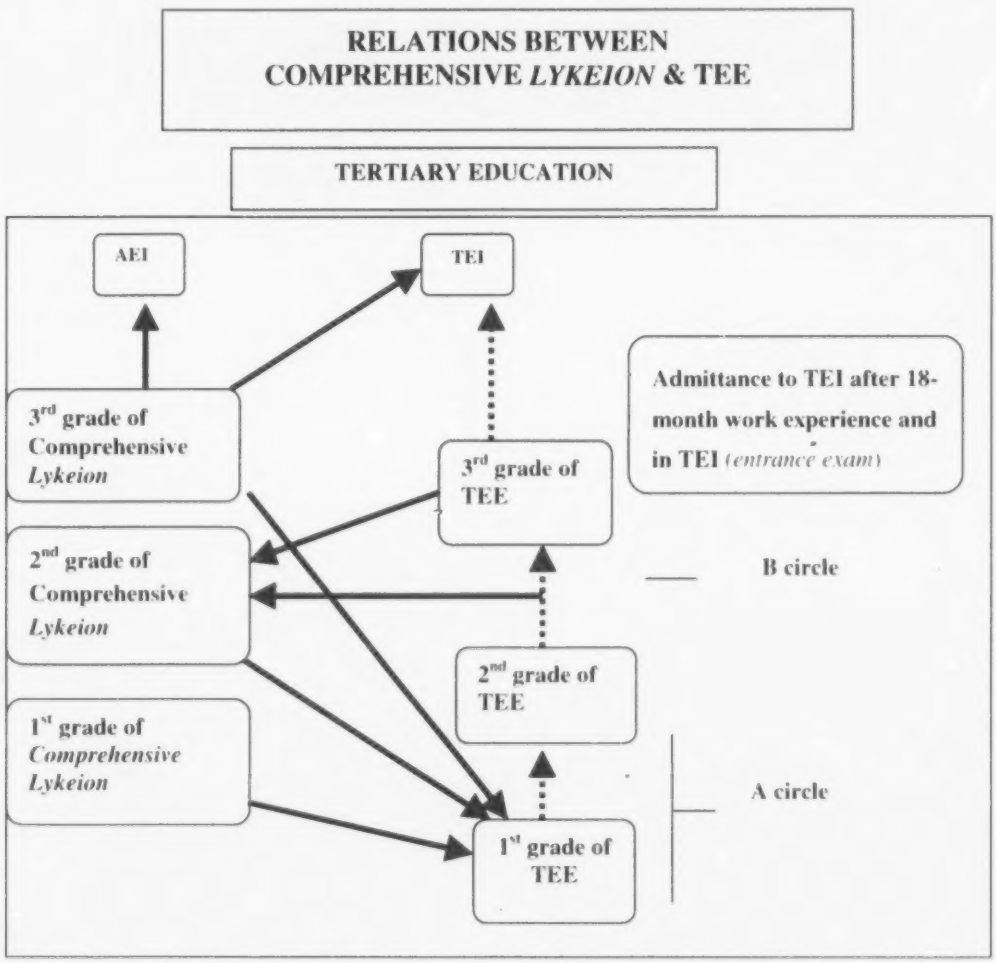

Figure 3. Relations Between Comprehensive *Lykeion* and TEE. (Source: Ministry of Education.)

Emphasis is placed on the acquisition of vocational skills at the workplace. In order to achieve this, relevant contracts should be signed with enterprises both in the public

and the private sector, thus creating the preconditions for a local labour market. In order to respond to the demands of the labour market, particular attention is being paid to a reform of fields of occupational specialisation. Vocational training programmes will be organised towards this end and technical and vocational institutes (TEE) will be given new curricula and books.

Vocational education is provided by the TEE, which belong to the upper secondary level of education in Greece. Lower secondary school (*gymnasio*) graduates may enroll at a TEE. Studies last up to 3 years, extended to 4 years in the evening TEE, and are divided into two circles. The first circle lasts 2 years, though longer study times are possible in specialisation fields involving apprenticeship training. The second circle (upper circle) lasts 1 year. Upon completion of the first circle, students can either continue their studies in the second circle of the TEE or proceed directly to the labour market, provided they have acquired a vocational certificate and a license to practise their occupation; if they wish, they can transfer to the second year of studies at the comprehensive *lykeion*. Those graduating from the second circle of the TEE can also continue their studies in an IEK of a relevant specialisation field or can instead opt for the labour market; they can even continue their studies in the TEI provided they have 18 months of work experience and have successfully passed the TEI entrance exams.

A basic target of the horisontal link between the TEE and the comprehensive *lykeion* is enabling students to change over from one to the other form of education whenever they would like to follow a path other than that of tertiary education; they are offered an opportunity to enroll, if they wish, in the first year of TEE studies while continuing with the common subjects in which they have already been examined in the comprehensive *lykeion*.

The curriculum of the TEE includes general subjects and basic vocational education in the relevant vocational fields and specialisms, as well as laboratory training and practical exercises.

In the first and the second year of studies in the 1st circle, general subjects cover 40% and 35% respectively of the curriculum, and 25% in the 2nd circle. Vocational skills are paid a great deal of attention and are acquired through practice in laboratories and at the workplace.

D Access to Tertiary Education

Until now, because of the limited number of places available, students wishing to enrol in a tertiary education institution have had to take the panhellenic entrance exams (General Examinations). From the school year 2000-01 onwards, comprehensive *lykeion* graduates can enrol in all tertiary education institutions without further entrance exams. In practice, it means that all entrance exams are abolished and comprehensive *lykeion* graduates can enrol freely in universities (AEI) and higher technical establishments (TEI).

Tertiary-level education comprises five scientific fields of studies. Comprehensive *lykeion* graduates can choose one from the following five fields:

- humanities, law and social sciences;
- positive sciences;
- health sciences;
- technological sciences;

- economics and management.

In addition there are

- optional programmes of studies (P.S.E.) in universities and TEIs (a new institution);
- the Greek Open University (E.A.P.) (a new institution).

It is estimated that by the year 2000, 85,000 places will be available in tertiary-level education, a number covering that of comprehensive *lykeion* graduates who would like to continue their studies in the AEI and the TEI. The foundation of 70 new departments has been announced, increasing the number of available places by 13,000 (Source: Ministry of Education).

Two additional institutions, those of optional programmes and the Open University are also introduced. There are 32 optional programmes of studies, introducing continuing tertiary-level education with a focus on new subjects and on inter-departmental co-operation. The Greek Open University operates through distance learning. Comprehensive *lykeion* and university graduates can enroll in any of these programmes - priority is given to the cohort of those aged between 23 and 45.

E Appointment and Evaluation of Teaching Staff

Until now, all teachers on every level of primary and secondary education were appointed from a waiting list kept by the Ministry of Education. The only condition for someone to be registered on the list was being the holder of a degree in the subjects they wished to teach. In the years 1998-2002 there will be a transition period in teacher appointment during which a number of places will be offered to those on the waiting list while the rest will go to those who have succeeded in special exams first conducted in June 1998.

The Supreme Council of Staff Appointment (ASEP) advertises and carries out this exam every two years. Those who pass it successfully are registered on another waiting list which is valid for two years. The candidates are examined in the didactics/methodology and the subjects of their specialisation field. These examinations have been extremely controversial, but it is too early to draw any conclusions or to make any final judgement.

After more than twenty years, evaluation of teachers is re-introduced in all forms of education. The efficiency of teachers and the effectiveness of schools and the system in general will be judged on both regional and national level. There will be an internal and an external evaluation. The internal evaluation will be carried out by the School Evaluation Committee, the headmasters, the Supervisors of Regional Education Offices and the School Advisors. The external evaluation will be undertaken by a new institution, the Body of Evaluators. Four hundred new positions will be advertised; candidates will be selected after a public examination and provided they should hold postgraduate qualifications and have 12 years of experience of education.

Furthermore, above all these bodies of evaluators there will be another committee placed in charge of controlling and co-ordinating all the aforementioned evaluators. This committee, consisting of persons of repute, will be appointed by the Minister of Education and given tenure.

3 A Discussion on the Basis of the Criteria for Mapping National Strategies

The following discussion concerns the Ministry of Education's intentions regarding the recent innovations in the Greek upper secondary education system. We are not in a position to evaluate these innovations or even to express our judgement of this system because they are only in the first phase of their implementation. We shall instead take up the announcements of the Ministry of Education regarding the recent reforms in the educational system.

Main Focus of the Reform
The main focus of the reform is on curricular changes and certification in the comprehensive *lykeion* leading to academic education, and on the establishment of the technical and vocational institutions which lead to professional qualifications and to the labour market.

Purposes of the Reform
The main purpose is to create a modern and effective public education system that meets the needs of the 21st century by involving students, parents and - especially - teachers in the educational process. Abolition of university entrance exams as well as the provision of students with qualifications satisfying the demands made by the labour market are the main problems to which the reform is responding. Although the reform aspires to become a policy, at the moment it is still at the experimental stage.

Concept of Parity of Esteem
Enhancing the vocational education offered by the TEE is approached through the introduction of general subjects into the curriculum. However, TEE graduates can gain access to universities only under certain conditions, that is, work experience and success in TEI entrance exams (the TEI are lower in status than universities, being equivalent to the former polytechnics). As for universities, TEE graduates cannot be accepted at all. Therefore, academic and vocational programmes are not equivalent; the only thing that may make vocational education attractive to students are the qualifications that licenses a graduate to practise an occupation.

Problems of Equality
The roles of the comprehensive *lykeion* and the TEE are distinct. TEE graduates can proceed to the labour market, whereas comprehensive *lykeion* graduates gain access to tertiary-level institutions. First-circle TEE graduates may enroll on the 2nd year of studies in the comprehensive *lykeion* and acquire a certificate qualifying them for a place at a university.

Progression
It is too early to risk any judgement. As happens with every radical reform, there are a number of problems at this early stage, which will hopefully be solved in the near future. Transition from one form of study to the other is possible at the expense of lengthening the period of study. Progression is also promoted through the establishment of schools of second chance for those who have dropped out of school.

Scope of the Reform
It is a national reform embracing lower secondary school (*gymnasio*) leavers.

Equivalences/Recognition
It is a fully national reform; since it is in its initial phase, we do not know as yet how far it is being recognized by employers. It will definitely be recognised by tertiary institutions.

Curricular Toolboxes/Knowledge
New teaching methods, books and subjects are introduced. In the technological sciences field of the comprehensive *lykeion* new laboratories are organised. TEE students are encouraged to get on-the-job training.

Teaching and Learning Arrangements/Pedagogy
Teachers' seminars are organised throughout the school year. Teaching methods become more creative. Students are no longer passive recipients accumulating knowledge and presenting it in a mechanical way. Instead they collaborate closely with teachers and fellow students. Students enrich their knowledge, sharpen their understanding, judge, evaluate, analyse, conceive and create either alone or collectively. The lesson becomes more enjoyable, activating the teacher and stimulating the student.

Assessment
Pure rote learning is not evaluated. Learning parrot-fashion is useless. The student has to use his or her critical judgement. What is assessed involves projects, presence in the classroom and participation in classroom activities throughout the school year. Student's grades are announced on the school bulletin board every four months and after the end-of-year exams.

Role of Teachers
The teachers have not been fully prepared for the reforms. Although information brochures and assessment books have already been published, there is inadequate in-service training especially in the TEE. In the future, the additional qualifications required for competence for teaching posts can possibly upgrade the role of teachers.

Social Inclusion
The reform promotes the achievement of all types of learners attending the comprehensive *lykeion* (academic achievement) and the TEE (vocational achievement).

Networking and Organisational and Institutional Aspects
The reform introduces new relationships between schools and businesses, since TEE students must undergo on-the-job training to qualify.

Effect on the Labour Market
Nothing can be said as yet. Previous research has shown that general *lykeion* graduates have little chance of gaining access to the labour market. In spite of the Ministry's announcements, comprehensive *lykeion* certificates do not seem to have any particular value. These problems will not go away, that is, comprehensive *lykeion* leavers will be

unable to find employment because of a plethora of university graduates competing with them and because there is little demand for certain specialisms.

Dominant Dimension

The dominant dimension concerns free access to universities, and also the separation of those who do not wish to follow the academic path and prefer the vocational one.

4 Additional Comments and Concluding Remarks

The reforms discussed above stemmed from the Government's resolution to offer free access to universities and the TEI after the year 2000.

There are also a number of questions and problems that cannot be overlooked. The most serious of them are related to the implementation of the new curricula. No appropriate books exist as yet and the teaching staff is complaining that they have not been offered adequate training that would have enabled them to cope with these changes and transfer them to the classroom. In addition, there is a great deal of reaction concerning the application and effectiveness of these reforms.

Secondly, as compared to the former general *lykeion*, the new curriculum of the comprehensive *lykeion* emphasises mathematics and pays less attention to social knowledge. This shift in focus is taking place in a period in which the significance of social skills for entry into the labour market is more than obvious. In the TEE, both social sciences and history are excluded from the curriculum. Recently there has been a strong reaction against the abolition of sociology and history. This move is indeed highly surprising if we consider the fact that the establishment of the TEE has to do with the provision of direct access to the labour market through the acquisition of appropriate knowledge and skills.

A third major issue has to do with evaluation of teachers. After so many years with no evaluation at all, teachers are reluctant to be once more subject to assessment because they are still under the influence of unpleasant memories of the past, in particular of the seven-year dictatorship and of the years before; during that period, school inspectors were the only people who assessed teachers' work, and there were many cases of prejudiced evaluation owing to political convictions or personal quarrels. The same grave concerns apply to the case of teachers' appointment. Their contention is that the exam system debases their university degrees since they are asked to sit exams once more. The reaction has become so strong that during the first exam last June, serious demonstrations and riots took place. Furthermore, teacher unions are claiming that other ways of evaluation could be introduced; also, they insist on the continuation of the Ministry of Education waiting list.

Nothing is yet known about VET educators. It is common sense that the reform will call for a new kind of educators. This uncertainty will become easily understandable if we consider the Greek political reality, that is, the circumstance that the policy of a minister of education is either considerably changed or rejected outright by the next holder of the post even the same political party. In Greece we still experience a situation in which educational policy is based more on the ideas or plans of a certain minister, on the organisations and social groups who influence him, than on the overall policy of the governing party.

It becomes obvious from the above that there is a high degree of uncertainty about and reaction against the new reforms. Since we are only in the first year of the implementation of these reforms, everything is still in question and in the experimental stage. Time will reveal how many of these changes are feasible or how they can improve.

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Interim Report of the SPES-NET Project From Hungary

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Since the first report of the SPES-NET project in summer 1998 some changes have taken place in the organisation of the Hungarian educational system regarding the new structure of ministries after the new general election in Hungary in 1998. The former Ministry of Labour does not exist any more, so that all the tasks linked with post-16 vocational training has become the responsibility of the Ministry of Education. Naturally this means that educational policies have taken on some new aspects, but the main strategies have not changed.

This report will summarise the most important features of and statistical data on the Hungarian VET system as a part of Hungarian post-16 education. The data is based on the last few years' information on the educational system.

After the economic transition a number of serious problem were found to beset the inherited education and training system. Secondary-level vocational training was delivered in too specialised a form and started too early (at age 14). Specialised vocational education and training provided detailed practical instruction for highly specific occupations but there was little theoretical instruction in the underlying scientific and quantitative principles. Those completing these programmes were productive only within the confines of these narrow job specialisations and were not equipped to adapt to changes in the evolving market economy. Moreover, training relied heavily upon on-site practical experience in enterprises. Under the market pressures of the transition, many of these enterprises have closed or lost their capacity to provide such training. Finally, the training programmes were almost exclusively pre-service and focused on industrial and agricultural specialisation.

Recognising the limitations of its earlier vocational education and training programmes, Hungary moved early in the transition to make its educational system more flexible. The Ministry of Labour or, as was mentioned above, now the Ministry of Education, implemented the most extensive reform of vocational education undertaken in any of the transition countries, designed to make the system more flexible, more efficient and more responsive to student demands and evolving labour market needs.

The main features of the reform are:

- major devolution of responsibility for management of training, including the involvement of employers and trade unions in the management of vocational training;
- extension of general education by two years (grades 9 and 10) before the start of vocational education;
- development of vocational orientation in the form of 13 broad job families in place of the well over 100 separate occupational specialisations previously offered;
- development of career counselling for students to inform them of employment prospects and associated training opportunities in various occupations; and

- development of post-secondary training, including a network of Regional Human Resources Development Centres to update skills, upgrade skills, and support moves from one occupation to another.

The objective of these reforms is to extend and improve general education in basic quantitative, scientific and problem-solving skills for all young people while still providing vocational orientation prior to post-secondary specialised vocational training. Taken together these changes are leading to a more cost-effective education and training system which is better able to adapt to the skilled manpower needs of an evolving economy, and more congruent with education and training systems in the OECD countries. The implementation of these reforms is being supported by the EU's PHARE programme and by the previous Human Resources Development Programme (HRDP).

The Ministry of Labour was the body appointed by the Hungarian Government to carry out the HRDP, funded by a loan from the World Bank, during the period 1992/97, but since May 1998 the project has been the responsibility of the Ministry of Education.

This project had three components :

- an employment component;
- an adult education component; and
- a vocational secondary education and training component.

The vocational secondary education component dealt in depth with 79 schools, retrained teachers, re-equipped classrooms, laboratories and workshops and so on. In addition a PHARE programme has gone some way towards supporting another 79 similar schools. Many other vocational secondary schools had no outside financial support but nevertheless adopted and implemented the newly developed curricula, which were considered more appropriate to modern economic conditions. The situation throughout the country at the end of the HRDP was that a number of schools had been superbly provided for and were operating with modern curricula, equipment and books of the highest international standards, serving their students and communities in the best possible way. However, other schools have had limited or no financial help and struggle to deliver a quality service. In this respect there is not an even provision across the country.

2 Secondary-Level Vocational Orientation Training

The Youth Training Department of the Ministry of Education (before May 1998, the Ministry of Labour) is the implementing agency. This department was responsible for the successful carrying out of the national core curriculum and the vocational orientation programme under the previous HRDP, which will be expanded in the Youth Training Project to include some 135 additional schools.

The project will finance approximately 340 person months of foreign fellowships, study tours (training for staff in new schools who will implement the previously designed curricula over an about two-year period). The project provides additional financing for acquiring materials and support equipment for curriculum design and for revision teams to carry out the curriculum in selected institutions.

The secondary-level vocational orientation component of the project will expand the use of the improved vocational orientation curriculum in secondary schools to provide a better basis for improved productivity and improved job mobility as the economy continues to evolve.

The component will require the following activities:

- Infrastructure for core curricula will help approximately 100 vocational secondary schools to put into practice the seven new academic core curricula for grades 9 to 12 developed under the HRDP. The schools will be selected on the basis of principles, criteria and procedures agreed on with the World Bank. Only schools which did not receive support under the HRDP and who have agreed to adopt the new vocational orientation curricula starting in grade 11 will be eligible. In addition, approximately 35 schools which were to receive support under the previous EU PHARE project to adopt the new core curriculum in grades 9 and 10 will be eligible to receive support to carry out the new vocational training curriculum in grades 11 and 12.

The seven academic core curricula are as follows:

- communications;
- informatics;
- social studies;
- natural sciences;
- mathematics;
- languages; and
- technology.

Job family curricula will assist approximately 135 vocational secondary schools to implement an average of two vocational orientation curricula each in grades 11 and 12. Only schools which did not receive support under the HRDP and who agree to adopt the new general subjects curricula will be eligible.

The 13 vocational job families are as follows:

- mechanical engineering;
- electronics;
- informatics;
- chemistry;
- architecture;
- transportation;
- agriculture;
- food industry;
- environment;
- trade;
- catering and tourism;
- economics; and
- health.

The technical assistance contractor will be administratively responsible to the Youth Training Department and will be under the general supervision of the Ministry of Education as a borrower.

The Ministry of Labour was to provide at least five full-time permanent local staff of which at least three were to be assigned full-time to this component. The new responsible agency, the Ministry of Education will also give financial support for local consultants and training and provide local office space for the consultants and their staff together with interpretation and translation services, office furnishings, support equipment, secretarial and printing services. Any purchases necessary to accomplish this will follow standard World Bank procedures.

The secondary-level vocational orientation component will be supported up to the amount of USD 33.9 million. The money will be used to increase the number of vocational secondary schools applying the new national core curriculum and the vocational orientation programmes developed under the HRDP. The budget will be allocated as follows:

- infrastructure for core curricula, up to the sum of USD 9.1 million. This will finance hardware, software and limited technical assistance and staff training to help approximately 100 vocational secondary schools to implement the seven new academic core curricula for grades 9 to 12 developed under the HRDP. The schools will be selected on the basis of principles, criteria and procedures agreed on with the World Bank. Only schools which did not receive support under the HRDP and who have agreed to adopt the new vocational orientation curricula starting in grade 11 will be eligible. In addition, approximately 35 schools which received limited support under the previous EU PHARE project to adopt the new national core curriculum in grades 9 and 10 will be eligible to receive support to carry out the new curriculum in grades 11 and 12;
- support for Job Family Curricula up to the sum of USD 24.8 million. This will provide hardware and software and limited technical assistance and staff training to help approximately 135 vocational secondary schools to implement an average of two vocational orientation curricula each in grades 11 and 12. Selection of the schools will follow principles, criteria and procedures agreed with the World Bank. Only schools which did not receive support under the HRDP and who agree to adopt the new core curricula will be eligible.

As for the principles and criteria used in selecting participating schools, minimum criteria for eligible institutions and programmes include the following:

- legal status: financing is open to any Hungarian state, non-state, or private education institution which is legally constituted as a secondary-level school and whose main fields of activity include the provision of secondary-level vocational training for young people;
- programme: the school applying for financing must be committed to using the seven core and the thirteen job family curricula as well as the materials developed under the HRDP, and offer at least two job family curricula;

- timeline, delivery: the applicant school must be committed to launch classes from the beginning of the 1998-99 academic year, and continue them for five consecutive years;
- counselling: the applicant will provide career orientation, counselling information and services;
- staff and facilities: the applicant must commit itself to involve the staff in in-service training and make the necessary support facilities and materials available to support the installation of the new programmes;
- graduate status: the applicant must agree to provide information on the status of its graduates (i.e. whether they have found employment or are in further education) to the Ministry of Education six months after the completion of the programme;
- previous support: the applicant must not have previously obtained support from the World Bank or from PHARE-financed projects;
- local support: the applicant must have provided letters of intent from the administrative and teaching staff stating their willingness to participate in the project and letters of endorsement from local authorities.

The weighted criteria for ranking applicants who meet minimum criteria are:

- demand: evidence of labour market demand for the job family or families for which support is being requested (i.e. an endorsement by the local tripartite council, hiring commitments from enterprises, labour market information, job placement rates from existing similar programmes);
- linkages, articulation: evidence of linkages with enterprises and with other schools in the country and internationally, including articulation agreements with post-secondary programmes which are willing to provide advance credit towards the completion of secondary-level job family programmes;
- financial support: evidence of local financial support from the school, the community and local authorities;
- services: availability of existing equipment for the proposed job family, availability of required facilities for new core curricula and job family curricula;
- staff: their quality and experience, including practical work experience in the job family programmes to be offered;
- experience with job family curricula: additional weight will be given to schools which have already attempted to initiate the new job family curricula, even without outside PHARE or World Bank project support; and
- proposal: overall quality and completeness of the proposal.

3 Statistical Data on Streamlined Vocational Training

As a part of post-16 education in Hungary, streamlined vocational training is changing in significant ways as regards both its structure and its contents. However, this report also contains a great deal of information about statistical data on vocational education in general.

This report is proposed to outline the development of vocational training inside the school system, the changes that have taken place in the material and personnel-related

conditions for its functioning, and the in potential for and actual participation in vocational training.

4 The System of Institutions

In the school year of 1995/1996, there were 1,646 secondary education institutions or institutional units in operation in Hungary, including 1,353 vocational training institutions offering studies in different specialisms and occupations. The proportion of vocational training institutions in all secondary education institutions is 82.2 per cent.

In the school year of 1995-96, there operated in Hungary 293 academic upper secondary schools (grammar schools), 182 multiple-profile academic upper secondary schools with a vocational secondary school, 461 vocational secondary schools, 349 vocational training schools and 361 secondary-level vocational schools.

Among these institutions, the proportion of those offering (also) GCSEs increased from the previous year's 55.5 per cent to 57 per cent. This change was mostly at the expense of the secondary-level vocational schools. Partly as a result of demographic changes, partly because of the increased expectations and social requirements involved in choosing traditional secondary education, the whole institutional network of secondary education has developed very intensively. Between 1980 and 1990, the number of these institutions increased by 35 per cent and between 1990 and 1995 by an additional 38 per cent.

Especially since 1990, the number of those wishing to participate in the provision of secondary education has increased. In the school year 1995/96, some 87 per cent of secondary education institutions were operated by local authorities (as compared to 91.6 per cent in the previous school year), and the proportion of institutions operated by churches and by foundations increased. As regards academic upper secondary schools, 15.7 per cent were run by churches, nearly 7 per cent by foundations, while in the case of vocational secondary schools, foundations assured the functioning of 5.2 per cent of such schools, that is 24 institutions. The local authorities have a decisive role in carrying out vocational training tasks. In addition, in the school year 1995/96, 16 such schools were operated by foundations.

What follows is a brief description of the system of institutions delivering streamlined vocational training in Hungary. *Vocational schools* provide a 2- or 3-year training programme following the completion of primary education. In addition to regular vocational schools there are special vocational schools which deliver a 1- or 2-year training programme following primary education. Handicapped young people (special vocational schools) or non-impaired but disadvantaged young people who could not gain access to other training institutions or dropped out of them, receive training that prepares them for simple jobs or for starting their independent lives (regular vocational schools). This form of training does not provide a GCSE or a certificate entitling the holder to take the GCSE or to apply to any higher education institutions. *Vocational training schools* offer either a 3-year training programme following primary education or a 1- or 2-year streamlined supplementary training programme following the completion of four years of secondary schooling. Trainees are prepared for jobs requiring qualifications and awarded skilled workers' certificates recognised nationwide. The 3-year training programme does not lead to a GCSE, nor does the certificate issued by these institutions mark the completion of secondary school studies or entitle the holder to take the GCSE or to apply to any higher education institution. *Vocational secondary schools* offer general education, train qualified technicians (technical secondary schools), provide skilled workers' qualifications (vocational secondary schools for training skilled workers), and other vocational qualifications (vocational secondary schools offering secondary-level training), and prepare trainees primarily for specialised tertiary-level studies.

5 The Students

As regards the past decade and a half, the number of students successfully completing elementary education reached its peak in 1989 at 171,000 pupils. In the 1980s the ratio of students continuing their studies in secondary education stabilised around 93 per cent, and there was hardly any internal movement among the different types of institution. The regular pattern was that 20 per cent of those finishing elementary education went to the academic upper secondary school, 26 per cent to the vocational secondary school, and 47 per cent to a vocational training school or vocational school.

The demand for secondary education grew in the 1990s, especially in those secondary education institutions (also) offering GCSEs, while vocational training schools and vocational schools have lost a great deal of their popularity.

At the end of the 1994/95 school year, 122,400 pupils successfully finished their elementary education. From among them, 121,700 pupils (99.3%) continued studying in the 1995/96 school year, while 33,000 went to academic upper secondary schools, 41,300 to vocational secondary schools and 5,400 to secondary-level vocational schools.

6 Students in the Academic Upper Secondary Schools and in the VET System

Of the 121,700 students continuing their studies, 27.1 per cent attended academic upper secondary schools, 33.9 per cent vocational secondary schools and 34.5 per cent vocational training schools.

Due to demographic changes, total student enrolment decreased by 15 per cent , that is by nearly 26,000 in 1990-1995. In the 1995/96 school year, a total of 148,000 students started studies in the first form of secondary-level institutions, as compared to 174,000 in 1990/91. This shift is visible first of all in a drop in the number of students in the first form of vocational training schools to two thirds of the 1990 enrolment. Between 1990 and 1994, the number of students enrolled in academic upper secondary schools increased by an annual 500-1,000, but in 1995 academic upper secondary school enrolment dropped by 2,000 (5.5%) from that of the year before.

The number of students in the first form of the vocational training schools increased by 2,600 in 1990-1993 - to 50,000 - but in the two following years enrolment dropped by 4,000 (8%). After the peak of 84,500 students in vocational training in 1989, a continuous decrease started, and by the 1995/96 school year the first forms of vocational training schools had only 55,500 students.

By the 1995/96 school year, enrolment in all types of institutions decreased as compared to the previous year, in the first forms of academic upper secondary schools and vocational secondary schools by 5.4 per cent each, in vocational training schools by 9 per cent and in vocational schools by 19 per cent.

In the 1995/96 school year, 24 per cent (36,400) of those enrolled in the first forms of secondary education institutions were academic upper secondary school students, 31.5 per cent (46,300) vocational secondary school students, 37.5 per cent (55,500) vocational training school students and 6.7 per cent (9,900) vocational school students.

Out of the 46,300 students attending the first form of the vocational secondary school, 14,400 study in technical vocational training schools, 7,100 in the first forms of

vocational secondary schools training skilled workers and 24,800 in schools offering secondary-level vocational training.

More than half of those studying in the first forms of vocational training schools prepared for industrial trades. The decline that has been going on for years is taking place mainly in this sector of the economy.

In the school year 1995-96, altogether 529,300 students studied in the day classes of secondary education institutions, amounting to 79.6 per cent of the 14 to 17-year-old population (76.8 per cent in the previous year). Out of these, 388,400 studied in vocational training institutions, representing 73.4 per cent of the total number of students in secondary education.

Between 1980 and 1992 the number of students increased by 46 per cent - from 370,000 to 540,000 - but since the peak number reached in 1992/93 there has been a continuous decrease, not balanced out even by the ever-increasing number of participants in the streamlined vocational training programmes following completion of secondary schooling.

The total number of students in academic upper secondary schools and vocational secondary schools has been growing continuously in the past decade and a half. During this period, enrolment in academic upper secondary schools increased from 89,000 to 141,000, while that in vocational secondary schools almost doubled, from 113,800 to 208,400.

In the 1980s vocational secondary schools coped with the deviations due to demographic changes as well as they ever did. In the ten years between 1980 and 1990, the total number of students in vocational training schools increased from 154,000 to 209,000 (by 36%), while in 1990-95 - in only 5 years - it dropped again to 154,000.

The total number of students attending secondary-level vocational schools peaked in 1993/94 (30,000); in 1995 these institutions had 25,700 students. Among the institutions belonging to this group the vocational schools for disadvantaged children have been working with more and more students since 1990, and nearly 60 per cent of all secondary-level vocational school students study in them.

The distribution of students between different types of secondary education institution is best characterised as a reshuffle among vocational training institutions, since the academic upper secondary school more or less maintained its 25 per cent proportion in the total number of students. As a result of the drop in the percentage of students attending vocational training schools from 42 to 29 per cent, the percentage of those studying in vocational secondary schools and secondary-level vocational schools increased from 30.8 to 39.4 per cent and from 3.3 to 5 per cent respectively. This significant shift actually took place in the course of the last five years.

Out of the 208,000 vocational secondary school students in 1995/96, 90,000 trained for industrial-technical trades, 69,000 for services and 24,700 for commerce/ catering. An examination of training according to the trades and vocations for which students were being prepared reveals that in 1995, 60,000 students were attending technical secondary school programmes - their numbers increased by 18 per cent in five years - while 32,000 attended vocational secondary school courses offering training as skilled workers. There were 116,000 students on vocational secondary school programmes offering secondary-level vocational training - 40 per cent more than in 1990, most of them (38,000) taking economics programmes. The increase of 40 per cent in their

number was mostly due to the 30 per cent growth in enrolment on economics programmes.

In 1995/96, more than half of the 154,000 students training as skilled workers - numbering 87,800 - were training for industrial trades, 24,700 for commerce/catering and 17,000 for the construction industry.

7 The Labour Market and the VET System

The decrease in enrolment so characteristic of this school type - in five years there has been a drop of 55,000 - concerned mostly those industry-oriented programmes where the majority of the students had received their training, resulting in a fall of 30,000.

There was only a minor shift in the distribution of students training as skilled workers between economic sectors in 1995/96, when the number of those studying in industry-oriented programmes decreased from 58.1 to 56.7 per cent. Even though enrolment in service programmes is rather low, it is only on these courses that we can see a positive change in enrolment figures - in five years there has been a rise from 9,000 to 12,500 students.

The proportion of those studying in secondary-level vocational schools in the total number of students is not significant - in 1995 such students amounted to no more than 25,700 (4.9 per cent of all students). Some 100-120 different trade programmes are available in these institutions.

When the efficiency and success of education and vocational training is assessed, one of the many significant indices are the number of drop-outs and the number of repeaters. In the 1980s dropping out during the training period characteristic of the type of school was relatively high among students in secondary education institutions, but the differences among the types of institutions remained: most drop-outs were registered in vocational training schools, while academic upper secondary schools had the lowest numbers of them.

In the 1980s, 23 per cent of students enrolled on the 3-year programmes for those with elementary education never reached the third form, while 18-16 per cent (the figures had decreased by the end of the decade) of those on the four-year programmes of vocational secondary schools and 12 per cent of those in academic upper secondary schools did not reach the fourth form.

In the 1990s vocational secondary schools were the secondary education institutions that improved most in this field, and while the drop-out rate increased in 1993 (from 16 to 17.2%), by 1995 it had fallen again to 10.8 per cent. In 1990-95, the rates of dropping out during the characteristic training period of the given institution fell in academic upper secondary schools from 12 to 8.5 per cent, in vocational training schools from 23 to 20 per cent. Drop-out rates are not evenly distributed among the forms. They are higher for second and third forms, and this is true of all types of institution.

In the three-year training programme of vocational training schools for those with elementary schooling, the past five years' rate of dropping out between the first and the second forms fell below the 16 per cent average only in 1992 (15.3%). In vocational secondary schools in 1990-1994, the drop-out rate increased only by a few tenths of a percent from 6.2 per cent, but in 1994-95 it rose by 2 per cent to 8.6 per cent. In the

academic upper secondary schools the trend is the opposite: the drop-out rate between the first and second forms fell from 5.3 per cent in 1990 to 2.8 per cent in 1995.

In the case of vocational training schools the drop-out rate between the second and the third forms fell from an annual 5.5 per cent in 1990 to 1.4 per cent in 1995, in academic upper secondary schools from 3.2 to 2.6 per cent. Because drop-out rates between the third and the fourth forms has again increased considerably - especially in the last two school years - mainly among vocational secondary school students, but also to some extent among academic upper secondary school students, most probably those finishing the first form successfully must once again face stricter vocational and academic requirements when they enter the fourth form - thus preparing for a successful GCSE.

In 1995, 31,000 students sat successfully for GCSE in academic upper secondary schools, 38,100 in vocational secondary schools - all of them finishing the fourth form successfully. From among them, 20,425 were admitted to higher education institutions in 1995/96, 22,307 students continued their studies in the fifth form of vocational secondary schools, and 4,500 students took up post-GCSE vocational training programmes.

In 1996, some 32,000 academic upper secondary school students and 40,300 vocational secondary school students finishing the fourth form successfully took a GCSE. According to preliminary data, in 1995/96 22,000 of them enrolled as daytime students at higher education institutions, while 25,400 entered the fifth form of vocational secondary schools and 3,300 took up training as skilled workers. According to the data, some 30 per cent (about 21,000-22,000 students) did not continue in streamlined education on day courses, or did not continue their studies in their graduation year.

In the 1995/96 school year, 24,132 students were enrolled on the day courses of streamlined fifth- and sixth-form post-GCSE vocational training programmes, as compared to last year's 16,500 students and to 7,000 students in 1990, and in vocational training schools 8,900 students with GCSE were studying for a trade in one or the other of the two higher forms (in 1994/95 the figure had been 8,000). In 1995, 50,000 skilled worker students received their trade certificates, in 1996 48,000.

Immediately continuing one's studies in higher education institutions - that is, taking up tertiary studies in the year of receiving one's combined GCSE and trade certificate - increased from 20.2 to 30.6 per cent between 1990 and 1995.

In May 1995, of the nearly 86,500 students who applied to study on the 1995/96 day courses of higher education institutions 35,000 were accepted in the admissions period, amounting to 40.5 per cent of all applicants. The admissions indices rose from 18,500 of five years before to the almost double figure of 39,300.

In certain institutions, in the 1996/96 academic year the number of applicants was many times that of those who could be accepted, indicating that that particular institution was the students' first choice.

Art academies and the Police Academy had the worst excess application figures, with only 13 per cent of all applicants accepted. Of those applying to technical universities and colleges, an average of 60-62 per cent were admitted, while in all other higher education institutions except for nursery school teacher training colleges and college health care departments less than half of all applicants were accepted during the admissions period.

Hungary had in 1995 90 higher education institutions, of which 58 were run by the Government, 28 by churches and 4 privately or by foundations.

In the academic year 19995/96, day courses of higher education institutions had an enrolment of 129,500 students, an increase of 70 per cent from 1990. Nearly half of the daytime students in universities and colleges studied arts, a quarter technical subjects. The number of university and college economics students almost doubled between 1990 and 1995, while that of engineering students increased by 82 per cent. Of those day students, 20,000 received their diplomas in 1995.

In 1995/96, 22.7 per cent of the secondary-school age group (those aged between 14 and 17) went to the academic upper secondary school while 54.9 per cent attended vocational training institutions. Besides them, another 70,000 students aged 18 or over participated in daytime secondary education, 33 per cent of them in vocational training schools and in secondary-level vocational schools , 58 per cent in vocational secondary schools. Among those aged 18-22, 12 per cent were in higher education as day students. In addition, 26,700 students over the age of 22 also studied at universities and colleges. This latter group accounts for more than a fifth of all day students.

If we now turn to the total number of day, evening and correspondence-course students in streamlined secondary and higher education, 85.9 per cent of those aged 14-16 and 26.8 per cent of those aged 16-22 were in education in the academic year 1995/96.

The changes in and development of the contents of vocational training structures are more and more determined by the demands of the labour market in Hungary as elsewhere, because it is a basic duty of society to see to it that school-leavers have a chance to find a job, to be aware of what kind of labour market is awaiting them in the given country and region - that could vary a great deal - and to estimate how many of them can be absorbed in the labour market of the given region. For this reason it is important to know how many young people leave the school system and what kind of qualifications they have, and how many skilled/qualified and unskilled/unqualified young people could be expected to enter the labour market.

Reforms in Post-16 Education in Spain and Parity of Esteem in Upper Secondary Education

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1 Short History of Upper Secondary Education in Spain

Back in 1970 the Spanish educational system was strictly controlled, still under the Franco regime, as was formal vocational education (ages 14-19) as one of its parts. The old system is gradually being replaced by a new one, established in 1990, as shown in Appendices 1 and 2.

In the mid-1970s Spain became a democratic monarchy, and in the early 1980s the educational system was able to guarantee compulsory schooling for all.

In 1982 the Socialist party formed the government, initiating a process of reforms which, among others (such as the decentralization of the administration, with important influences on education), included education on its agenda. This process was reinforced in 1986, when Spain joined the then European Community, and formally recognized in 1990, when the LOGSE (Organic Act on the General Organisation of the Education System) was approved in the Parliament as the new Education Act.

The second half of the 1980s saw also the establishment of both the State *Consejo Escolar* (national-level School Council) and the Vocational Training General Council as the main mechanisms of participation and control over the planning of education throughout Spain.

At the same time during the 1980s a parallel system of non-formal vocational training was also developed under the auspices of the Department of Employment. It was kept outside the changes attempted in the formal education system.

In 1993, together with the introduction of labour market reforms, an Agreement on Continuing Training was reached by the authorities and the social agents (representing both employers and trade unions). At the same time, the first National Programme for VET was approved.

In 1996 there was a change of government, as the Conservative party won the general election. In April 1998 a new and much more ambitious National Programme for VET was approved, involving an attempt to coordinate the tripartite vocational education and training system consisting of formal VET, non-formal VET and continuing training.

As compared to the 1970 system, the most relevant changes in the structure of the upper secondary education system introduced in the 1990 Education Act are the following:

- shortening the period of study required for a baccalaureate (*Bachillerato*). The extension of the compulsory school-attendance age to 16 and the comprehensive character of compulsory education have reduced study times for the baccalaureate to two years. There are no changes regarding certification that would be relevant here;

- a more varied provision of baccalaureate qualifications. In place of a single baccalaureate with two different options in the last two school years there are now four different baccalaureates, with restrictions concerning the type of university studies which can be undertaken after the completion of a given type of baccalaureate;
- shortening study times in VET: instead of the previous five-year programmes there will be two separate levels of VET programmes, each of them taking no more than two academic years to complete;
- a significant increase of the provision of VET qualifications. Instead of 22 different qualifications the new system offers more than 150. The shortening of study times has helped to create more specialised programmes;
- a totally new understanding of the planning of VET provision as well as of curriculum design: all of the social partners, together with the educational authorities, decide on the curricular prescriptions of each vocational qualification, as well as on their delivery, renewal and updating.

2 Relevant Educational Policy Goals (Purposes of the Reform)

These are the main aims of Spanish educational policy as stated in the Eurydice reports:

- to extend free compulsory and comprehensive education to the age of 16, which is the minimum legal working age;
- to reorganise the various levels of education;
- to establish a new curriculum policy according to which the Autonomous Administrations, schools and pupils (through their choice between the available options) will each play their part in determining the final form of the curriculum, based on a minimum core curriculum established by the Central Administration for the whole State (*enseñanzas minimas*). The term curriculum covers the whole set of aims, content, teaching methods and assessment criteria for each of the levels, stages, cycles, sections and optional streams (*modalidades*) comprising the educational system; and
- to guarantee the educational and vocational guidance of pupils, especially with respect to the different education options and the transition from school to working life.

The aims of the new system, as they have been proclaimed by different members of the Government as well as by the institutions supporting it were the following. The competitiveness of our economy must be enhanced in order to satisfy the need of convergence with Europe. Further, social concertation was seen both as an aim and a means, particularly in VET. Regional development was also one of the objectives of the reform of the educational system.

But there were also other kinds of objective. The reform was expected to contribute to a new system to further the education of citizens and to promote both the integration of scientific, technological and organisational knowledge and the learner's capacity to learn on his or her own and to work in teams. These were clearly targets involving

human and personal development instead of economic development. They were centred on the learners and not on the system.

The last document to do with the 1990 reform, the second National Programme for VET, just approved in April 1998, expresses the following aims:

- creating, through the integration of the three vocational education and training subsystems, a National System of Qualifications to promote lifelong education;
- promoting labour market entry through school-business agreements;
- developing an integrated system of training and employment policies;
- introducing evaluation mechanisms in order to improve the quality of vocational education;
- building on the system to develop a European framework; and
- designing a specific type of VET provision for groups with special needs.

3 Resulting Changes in the Relations Between Initial Vocational Education and General/Academic Education and Between Initial Vocational Education and Enterprises

3.1 The Problems Faced

There are several issues that the new system is struggling to plan and systematise in order to take control over the whole structure and to be able to benefit from the efforts that every reform demands if it is to attain the targets originally set to it. Most of the targets have to do with the strategies to be followed in designing and expanding the new system, in which more room is given to the social partners. There is also an interest in linking the theoretical and the practical, in trying to bring both worlds closer to each other and thus improving the quality and status of vocational education, as well as in considering the baccalaureates as not just a means of driving students into university studies. In any case, the biggest effort seems to be put into the rationalisation and design of the new VET provision, where all of the above considerations must find a reflection in order to become reality.

The efforts directed towards work-based learning and education-business partnerships since the reform was launched seem to be one of its successes. For the first time in its history our VET system has some compulsory form of work placement, thus approaching the worlds of education and work there where they come together. While it was not a discovery of the 1990 Education Act, as its basis was already laid in the 1970 Act, this innovation is rooted in the compulsory aspect of the 1990 Act, which allows work-based training to be constituted as an independent module not depending on the others. However, there are many problems yet to be solved along the way to generalisation of the reform, of which the competitiveness which there will be among students to get a placement, a firm placement and a high-class one, will not be the least. If all students are expected to go through some kind of work experience, they must be able to find it at hand, and it must be related to their course of study. This raises some problems that the previous Alternance Training Scheme did not present, as it was a much more limited arrangement.

There are also the problems, which I have already discussed elsewhere, of the design, planning, delivery and assessment of training under work placements, as well as its relationship to school-based learning. Work placement needs to be considered under a curricular framework, and it has to include a substantial curricular component if it is to have something to do with vocational education rather than being no more than narrowly specific occupational preparation. All of these aspects must be urgently addressed, and lessons must be learnt from the best features of the practices followed under the Alternance Training Scheme, as well as from the mistakes made and the failures experienced during its years of existence.

And, of course, all of this has to do with the broader question, also taken into account by the reformers, of the education-business partnerships. These must be understood as a two-way dialogue rather than as a one-way relationship in which all the power would lie on the side of the employers. There must be a clear commitment on both sides towards cooperation, understanding and sharing benefits as well as efforts. All the parties involved must be well aware of the fact that there is a great deal of work to be done, and that it is the only way to create a successful vocational education system. However, there has not been much advance here and education is still little appreciated among employers. Much has been achieved in the years previous to the reform, thanks to the Alternance Training Scheme, but much remains to be done because the old system which was beginning to be well considered by the employers and by public opinion in general has been dismantled and replaced by a rather different one.

In this sense, the conditions that have shaped our country in recent years have not greatly promoted the involvement of and collaboration between local and social agents, what with all the struggles waged and even two general strikes staged in the early 1990s. Nonetheless and despite these conditions, specific agreements have been reached during the 1980s and even in the 1990s. The worrying thing here is a shift of focus from initial VET towards continuing VET, a shift which has been felt in the early nineties, following a trend to be seen in European policies on employment and training and on the mobility of workers within the Union. In several ways, this shift of focus poses a threat to the development of the reform, which has been addressing mainly initial training, as well as also implying a variety of risks to youth policies and educational policies both of them to some extent affecting the social stability of the nation. Yet, there seems to be an agreement on this issue among the public authorities, the employers and the trade unions, who are far more preoccupied with the workforce than with the unemployed and a growing underclass. However, the very existence of such consensus in some areas might make it easier to contemplate the possibility of further agreements concerning the development of initial vocational education.

This is strongly related to another element which is also on the agenda of the reformers, an attempt to stress the terminal nature of vocational education, a stress based on the entry requirements set for it as well as on the extension of compulsory education. By these measures the reformers intend to ensure that the young people receiving a vocational education will come out of the system to enter the labour market, profiting there from the skills and competencies they have acquired during their studies, and contributing to the development and improvement of our economy, which has traditionally lacked semiskilled workers as well as technicians able to fill in the gap

between jobs requiring a university degree and jobs not requiring more than a basic education.

Given this point, we need to take into account another trend in the system: the specialisation of VET taking pace in parallel with the vocationalisation of general education. If we attempted to consider all of the vocational education and training provision, both by the formal and by the non-formal system, we would rediscover in Spain some aspects of the debates that rose in Britain in the 1980s about the new vocationalism. It seems that the whole system is more and more market-driven, as if trying to respond to some problems which lie far beyond the resources that an educational system has to undertake social reforms of any kind.

On this particular stage, one of the leading roles is that corresponding to the VET system, and thus we can also identify some trends which could be defined as a campaign to market VET, an attempt to present it, together with the new baccalaureates, especially the technologically oriented ones, as *the* star of the new system. However, this seems an operation carried out mainly by the educational authorities, as if the employers and, to a lesser extent the trade unions, were just the clients of this operation, with nothing to offer but a choice to be made among the different qualifications that young people can acquire nowadays. This might help VET to stop being the Cinderella of the system any more, but the risks involved in such actions must be carefully considered. Again, it is a question of the kind of education-work relationships that we are trying to establish, as well as of those kind of relationships, traditions, topics and assumptions that we are trying to abolish.

The key issue, then, among those on the agenda of the reformers, is nothing but the planning of VET provision, and its relation to the resources allocated to it. This planning must be undertaken as a responsibility of all of the social agents, not just as the duty of the educational authorities. Steps have been taken in this direction through the establishment in the late 1980s of the Vocational Training General Council, its reform in the mid-nineties to allow participation of the different regional administrations, and the responsibilities it has assumed in the whole process of the reform. However, in the effort needed to reform VET provision much more attention must be paid to local needs and possibilities, and this can only be achieved through the decentralisation of the mechanisms. At the same time, the reform process must be prevented from becoming so expensive and inefficient that it would bog down. From this point of view, the different working commissions on the definition of formal vocational qualifications and their contents have done very good work, and it could provide many good lessons to be applied in the planning stage, which involves different issues and difficulties.

Finally, another emerging problem now that the implementation of the reform has begun are the overlapping levels of qualifications which have been detected in several areas. This involves the existence on the market of different training courses and options leading to similar qualifications, and therefore causing professional struggles among the different categories of qualifications within certain professions and occupations. This raises the question of the acknowledgement of qualifications among the professional bodies and of the value that they will have on the labour market, because as must not be forgotten here, formal qualifications are awarded by the educational authorities. To address the issue, the new National Programme for VET includes the creation of a National Institute for Qualifications, whose role will be of the greatest importance in the next few years. Among the other problems it faces, the new body will have to deal with

historical differences among the Ministries of Education and Labour, each with their own tradition of accreditation and each holding opposing viewpoints; and as a third party comes the Ministry of Industry, which has traditionally been the ministry in charge of certifying already qualified workers as legally permitted to take up work.

There are some other problems also entailed in the work that the reformers have ahead of them, involving mainly the change of traditions and behaviours in schools and training institutions. I consider them administrative and thus minor problems. Addressing them is, however, crucially important for the success of the reforms. They comprise a great many issues, concerning different levels of school organisation and management, both inside and outside the educational establishments, some to do with the teachers terms of service, some others with the involvement of the social agents in the training of young people.

Some changes will be needed, in this area, as regards the role of school inspection as well as the emerging role of inspecting work placements. As a result, new tasks must be performed and new competencies are required which up to now were completely absent from the Spanish educational system. They will also involve adjusting teachers' working hours and making up their weekly and course-time timetables. Teachers' secondments must also be included here, for secondments are necessary to help teachers to develop the abilities needed to carry out their new functions. Besides all these issues, new policies on school management and salaries will be needed because the changes to be made in vocational education are too substantial for the whole effort to be left to the teachers themselves under their present working conditions.

After that some attention must be paid to the changes which will inevitably have to take place in VET provision once the first big effort is made: the dynamics of the market, the development of productive sectors, the flows in the labour force and the changing links with the outside world that every school will have to develop. Decisions must be made about what kind of relationships there should be with businesses and how responsibilities and the power to demand the performance of the different functions should be allocated. Then there will be the assessment of the reform measures and the time and effort that must, in the initial stages of the extension of the reform, be devoted to a review that will both be more necessary than ever and present a challenging task.

All of these are in any case questions already taken into account by those in charge of developing and extending the reform. Things are less clear as regards the subjects that I am going to introduce in the next pages, and which will affect the reform itself as much as the factors recognised by the reformers. The following, then, are questions which have been avoided or sometimes forgotten, considerations possibly too broad to be noticed or too specific to be judged of any importance. Yet, they also will give us some keys to understanding what is happening with the reform process.

3.2 The Questions Ignored

Let us start with the more general questions, which concern the framework within which the reform has been developed. The new VET has been very clearly influenced by European guidelines and, even more than that, by European convictions and aspirations. Yet, in view of the role Spain has been playing in Europe since we joined the it in 1986, as well as of the expectations raised on both sides, we may suspect that an initial commitment has now given place to some kind of scepticism as well as to a realisation

of the actual effects of the Union. This has affected not only training policies but also, and even to a greater extent, agricultural policies, monetary policies. There have been more demands than contributions, and to a certain extent there has been an official abandonment of our own interests, followed by worries about their being replaced by outside interests. The implications of this attitude for vocational and training policies are quite serious: given that the focus has been set on the homologisation of qualifications and on the mobility of workers, we have changed our system without making profit from what we already had. At the same time, our own policies concerning non-formal VET have been changing at a pace set by European institutions. This despite the fact that we have not gone through the same developments as other European countries: the effort put into transition from school to work, into investment in local initiatives, into work experience, into the introduction of apprenticeships in different ways, into developing methodologies like those explored by the PETRA initiatives... Little of any of this has been seen in Spain in the late 1970s and during the 1980s, having only a reduced impact as innovative school experiences towards the end of the past decade, when new schemes and initiatives were reaching the stage where decision must be made about training funds. One of the problems which still remains unaddressed in Spain is that of youth unemployment and of transition pathways, nor does the shift in European policies towards continuing training and retraining of workers and towards updating of their occupational skills at all help to resolve this situation. At the same time, university policies are gradually losing their previous emphasis on initiatives addressed to those who fail at school or drop out.

On the other hand, the reformers have systematically ignored the fact that whatever may be the vocational value of Spanish educational qualifications, there is no correspondence between them and the structure of the labour market and its work hierarchies. Because qualifications are awarded by the Department of Education, students find it difficult to match their expectations on the labour market. Again, there is the question about the involvement of employers in education, playing a variety of roles as clients and, to a certain extent, as providers. The potential that employers and their organisations have in our country for playing such roles (especially roles other than those of being clients) remains unrealised. Another question here is how willing they are to become involved in these matters, which will presumably have long-term effects. Here the role adopted by the trade unions has not been very helpful because they are almost exclusively interested in employment policies or in the services that they themselves are offering, among which vocational training features only in the form of non-formal provision. To develop a tripartite system, as is the Government's wish, requires not only coordination between the Departments of Education and Employment, but also the active participation of both employers and trade unions, and the working out of agreements which will also be followed. And this has not yet been achieved, not in the field of initial occupation-specific vocational training.

However, there are certain other issues which have much more to do with life in schools and with the everyday pedagogy of vocational education. An important one is that of the organisation of the educational establishments, subject to historical factors which were submitted to in the system built in 1970 and which have generated already well established traditions, behaviours and even a culture of their own. Nevertheless, because of the lack of prestige of VET even among the academics working at universities, little research has been done on these phenomena in the last few years.

There has emerged a growing group of secondary-school teachers, distinct from those in the academic track, who gain access to jobs on the post-16 vocational track through a different set of examinations but who nevertheless have the same background as their academic-track colleagues and who very often deal with subjects nearly identical to those taught by their academic counterparts. There is also a parallel group of workshop leaders (*maestros de taller*), working alongside the subject teachers but having completely different backgrounds, qualifications, responsibilities and job classification. Both groups have developed their distinct set of studies offered in their separate educational establishments, a distinct way of relating to students, a distinct approach to curricular issues, all of which has resulted in a clearly differentiated VET culture with homogeneous features all over the country. No one of these parallel cultures has managed to solve the problem involved in the lack of occupation-specific initial training, nor seems it to be on the agenda of the reformers, who do not even worry too much about entry requirements and job access. A parallel culture has also developed over the years on the academic pathway. The confluence of the two cultures, the question of how instruction in academic and vocational subjects is, after 1990, to be shared between their representatives, is a question not yet addressed, any more than are the links to compulsory secondary education in those schools where it is also included in the educational provision.

By contrast, staff development has been stressed in the last few years, though on the basis of a narrow conception of what constitutes staff development, with measures limited to scientific updating and technological preparation and without any kind of attention being paid to pedagogical considerations. This only leads to a even greater vocationalisation of VET contents as well as being based on assumptions about teachers' roles which reinforce their deskilling and proletarisation, following a trend which can be identified at all levels of the educational system. If it is the objective, it might be better to extend the non-formal VET provision and to abolish the formal provision as a whole. If the development of the system is not based upon the professionalism, responsibility and autonomy of the teachers, then it might be better not to try to develop any system at all. If the marketisation which has afflicted non-formal VET reaches and becomes entrenched in formal VET, all barriers between the two will break down and there will be little chance left of a high-quality VET system.

It would have been a good start for this process to ask ourselves how to improve the practices that we already have, how to maintain the good practices and how to correct and amend the bad ones, and which structural changes would be needed in order to achieve this. Yet this question was avoided and it was taken for granted that the first step should be a total restructuring of the system, representing an attempt to complete by this means the radical separation of the two tracks, the academic and the vocational, at the post-compulsory level. The problem is that the restructuring of the system has made almost not change in the divide between the tracks. There has been a push forward, of course, delaying their separation and involving a search for a more comprehensive compulsory system, which was indeed needed. However, the great conceptual problems of the old system are still there while no effort has been made to retain its good features, developed as corrections to the system during the 20 years of its existence.

Another dark area in the reform of the Spanish VET system is that of the role of careers guidance, as regards both preparation for the choices which have to be made at

16 and advice on the decisions which must be faced at the post-compulsory level. Careers guidance is intended to help students to choose between the options offered by a VET system which has multiplied its educational provision while at the same time attempting to fit it into a modular format, which might give students a chance to improve their own career options and professional skills. However, students have been very badly informed about these possibilities, as vocational guidance has been playing the role of either trying to enrol people in the academic track helping to justify the way in which selection operates in the system. Of course, this issue should be taken into account not only in post-compulsory education but also in compulsory education, thus paying attention also to basic initial vocational education, a next stage after the completion of compulsory schooling, as well as in the baccalaureates. However, vocational guidance must be closely linked with the planned provision, operate alongside it and follow its developments, so as to be able to help students on an increasingly complex labour and education market.

Another of the important points not addressed by the present reform, or by the 1970 one either, is that of considering the creation of an alternative post-compulsory educational provision for handicapped and marginalised groups. This issue was raised in the early 1980s. A number of schools and teachers committed themselves to it because they were seeing the growth of a group of students for whom participation and progression were meaningless words, as they were deprived of any possibility of continuing in the educational system in a way that would have allowed them to actually benefit from their studies. Innovative experiences were developed during the past decade, some of them serving to underpin proposals such as those of the Social Guarantee Schemes offered at the end of compulsory schooling. Yet, these initiatives always fell on the margins of the system and neither the Ministry of Education nor that of Employment has paid them any systematic attention. It seems, then, that all the efforts within the system to increase retention among students with special needs might reverse now to an opening of expectations which reaches its top fairly soon in the system. There is research showing the success of such initiatives, and it would be a mistake to meet such expectations with nothing more than the provision of an open gateway to the non-formal system, where the pressures of the market would make it quite hard for such initiatives to be originated and survive. The question remains unaddressed despite the fact that those concerned are expecting answers to it.

Almost the same question could be asked about the future and indeed about the present operation of the Social Guarantee Schemes and, what in the long term is even more worrying, about the very organisation of this scheme. Who is going to run it, what kind of institutions are going to participate in it (schools, municipalities, but also non-profit organisations), what progression possibilities will be created through its successful completion, how are they going to relate to employment offers and to labour market regulations...Leaving this option to the last minute implies, in fact, a refusal to consider the possibility of educational continuity for the approximately 40 per cent of youngsters expected to be unable to successfully complete compulsory education. There is also the chance to consider giving these young people an age-related option instead of just a post-compulsory one, that is, giving students at 16+ but still in compulsory education the chance to move on to such programmes instead of maintaining a record of failure in the general track. Dialogue among the different autonomic authorities running and funding the experiments with such programmes is urgently needed, as is research

aimed at extracting lessons which would give the programmes credibility and an acknowledged status among educators, youngsters and the public. In the final analysis these experiments are still under the control of the Department of Education, which should take advantage of the situation so as to avoid the risk of them being converted into one more option among the non-formal VET provision.

Then there is a whole issue which still remains unresolved, that of the entry of young people into adult and working life: transition possibilities and pathways have to be considered as the key factor in the struggle against the new inequalities caused by the behaviour of educational systems and by the trends that the reforms are following. Special attention must be paid to the new rhetoric of education, introducing 'missions' such as educating for adult life, getting ready for working life, fostering initiative and an entrepreneurial attitude, education for local economic development, training for leisure...when in reality most of these missions are addressed to those facing a probable future on the dole and suffering from severe learning difficulties. In this sense, it seems that the marketisation of education and particularly of vocational education has contributed to a renewal of the old educational traditions and ideals, while in practice it is more clear that this is mainly a matter of marketing and coincidence rather than representing authentic commitment to introduce reforms in the whole educational system for the sake of education itself. This becomes clear when we consider what kind of training is demanded and what kind of employment is being offered, and the conditions under which both are being developed.

An emerging concept of work seems to be needed, a necessary new concept able to handle the paradoxes arising from unemployment and from the evolution of welfare policies in the advanced and industrialised capitalist Western countries, among which Spain can be placed, despite exceeding the UN indicators for developing countries only in the early eighties. Western societies are experiencing the rise of a new underclass, new social divisions leading to what has been known as 'two-thirds' societies, causing a reconsideration of the meaning of work as well as of that the meaning of 'survival'. Of course, the role of the educational system in confronting these major problems is very limited and secondary, but nevertheless it can contribute to the strategies adopted in attempts to cope with them. From this point of view the Spanish reform of 1990 could be seen as a lost chance, probably because it was a self-enclosed reform, mainly driven from the top and involving no in-depth consideration of solutions offered from the bottom as well as also because it was most probably the last reform to be introduced before the end of the century and yet not taking into account the complex but already existing framework within which it should have been developed.

4 The Spanish Educational System and the Post-16 Strategies

4.1 Questions About the Strategies Adopted in Spanish Reforms

In this final part of the paper I would like to review the four strategies identified by the Post-16 Strategies project in the light of what is happening in the Spanish case, as well as trying to interpret the system efforts on the basis of the strategies scenario.

Doubts about national labels are expressed here partly because of the difficulty in identifying one more strategy to better define the pathway to which we could allocate

the Spanish educational system. This is especially true if we consider that despite the national scope of reforms described above, some of the autonomic administrations have full powers to carry out reforms with the result that different autonomic administrations are applying them in somewhat different ways. If the Scottish and English cases were not taken into account, we might perhaps talk of several models addressing not only the same objectives but even the same reforms differently.

On the one hand, it seems clear that the strategy of vocational enhancement is the one best suited to describe much of what is actually happening in the upper secondary education system in Spain. This strategy can even be traced in the recent history in Spain, from 1970 until the national agreements reached during the nineties. However, we cannot forget that vocational education is still strongly determined by its historical constituency and that, therefore, many problems are not appropriately addressed when they are dealt only by the Department of Education. The fact that other state and regional authorities are also responsible for vocational education makes it clear that vocational enhancement cannot be considered as the most representative model of the Spanish case. There are even two different governing bodies for vocational education and for the rest of the educational system.

From a second perspective, we might consider that the requirements set higher vocational training - which are to be followed after the successful completion of a baccalaureate - may represent a strategy of mutual enrichment, as is also suggested by the fact that the four baccalaureates are designed to give students access also to working life, not only to higher education. But However, the same does not seem to apply to the intermediate vocational training, as practitioners are well aware.

From yet a third perspective, turning our attention to efforts made recently to bring formal and non-formal vocational education closer through a common framework which is designed to make possible the mutual recognition of certificates, we could also describe the developments within VET - not in Spanish upper secondary education as a whole - as a linkage strategy. These arrangements could be considered progression gateways rather than progression routes within the system.

4.2 Revising and Advancing the Post-16 Strategies

I have tried to show in these pages the different tensions underlying the reforms undertaken within the Spanish case. Such tensions may be found in several forms:

- First, in the last decade there have been contradictory reforms in Spain, with moves towards approaching what can be called European standards on the one hand (i.e. compulsory schooling until the age of 16) while, at the same time, there are also opposite tendencies: at a time when some European countries with a wide variety of vocational programmes are trying to reduce the number of different qualifications in search of more flexible training, Spain has sought to dramatically increase the number of vocational qualifications on offer.
- Second, though limited space has made it impossible to discuss the subject in detail, it is also clear that different reforms have aroused opposition. Such opposition has varied in its sources and intensity, stemming from the actions of particular groups of practitioners on the one hand and of trade unions on the other hand, later also from those of political parties. Employers have kept away from these quarrels and have

instead chosen to accept and welcome whatever reforms are introduced by the educational authorities. It remains to be seen how deeply committed they are to collaboration - and their collaboration is indeed needed.

- Finally, as in any educational reform, we can identify sources of resistance to the reforms, attempts to extend traditional practices into the new system. Such resistance comes not only from teachers but also from companies as well as from within the educational administration itself, where there has not been enough organisational reforms which should inevitably accompany any reforms of the curriculum so as to allow innovation to happen.

Given all this, there is the question, therefore, whether we can name national strategies or whether we should, rather, characterise different reforms, various phases of each reform and so on by appropriate adjectives along the road from the declared aims of any change introduced to the practices developed by following the regulations intended to achieve those aims.

Lasonen's (1998, pp. 179-185) examples of 'shared learning' also contribute to these impressions. In this sense, we might consider the possibility of adding some new questions to those raised by Young (1998) concerning issues of connectivity. In my opinion, further developments of the post-16 strategies should take into account: 1) considerations regarding social status; 2) issues to do with the institutional status of different tracks of upper secondary education; 3) historical development of the systems and 4) the socioeconomic context in which they are embedded.

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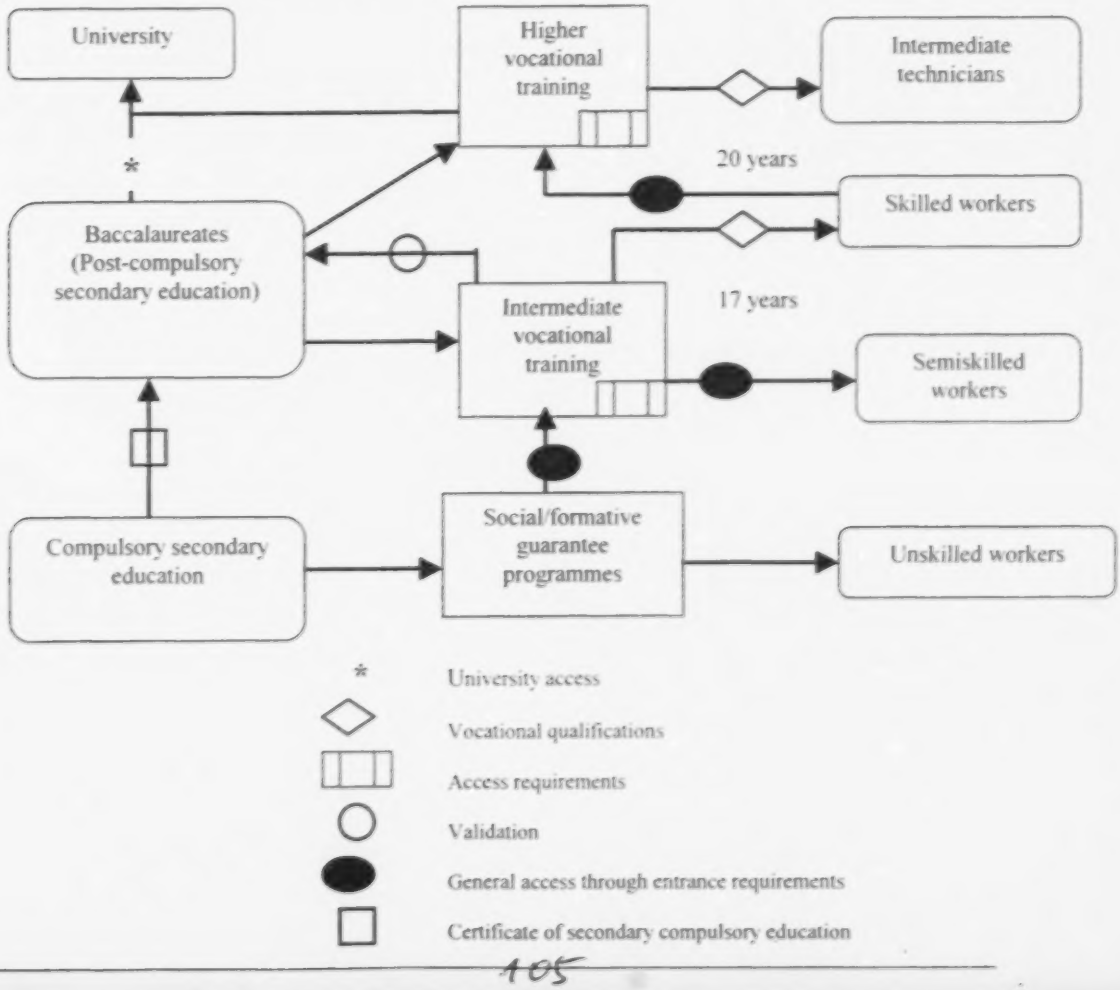
APPENDIX: Calendar of the introduction of the new educational system (1990), and thus of the disappearance of the old one (1970).

YEAR	LEVEL OF EDUCATION
1991/92	infant education
1992/93	1st and 2nd years of primary education
1993/94	3rd and 4th years of primary education
1994/95	5th year of primary education
1995/96	6th year of primary education
1996/97	1st year of *ESO* (compulsory secondary education)
1997/98	2nd year of *ESO*
1998/99	3rd year of *ESO* and 1st year of *Bachillerato*
1999/2000	4th year of *ESO*, 2nd year of *Bachillerato* and intermediate vocational training

Higher vocational training is being introduced during this period

APPENDIX 2: The new model of post-16 education



PART III

OLD PARTNERS' CONTRIBUTION TO THE PROJECT

PART III.A

OLD PARTNERS' COMMENTS ON THE NEW PARTNERS' REPORTS

"Eastern Reforms" and Their Impact on "Western Approaches"

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1 Mutual Learning as a Educational Policy Process in East and West

The late 1980s and the early 1990s were characterised by severe political and social changes in the former socialised Central and Eastern European (CEE) countries. These changes were followed by a process of "growing together" or at least reconciliation of CEE countries and the EU. Although the development of a market economy and of democracy in CEE countries has now been going on for nearly ten years, the division between East and West still exists. Traditions and habits of both sides have to be taken into consideration in explaining this process of growing together. Vocational education and training are one important aspect of these traditions and habits, both in CEE and EU member countries. Once the transformation process started, each CEE country was confronted with a reform of its vocational education and training system. Although the systems and the reform strategies adopted differ in each country, some common trends can be observed.

In most CEE countries vocational education systems are not as yet fully developed in the way they are in the EU. Because of traditions and habits linked with vocational education and the regional and national labour markets, it is not possible to transfer Western European vocational education and training systems to CEE countries. Some indicators show that higher qualification is a globalising process. Economic and social development seems to proceed along almost the same lines in different countries.

The development and integration of a European vocational education and training system is a challenge which can only be met step by step, in CEE countries as much as in EU member countries. For example, neighbouring countries (e.g. Hungary and Austria) are harmonising job descriptions. The necessity of comparing different vocational education and training systems is beyond question. Such comparisons will make it easier to find out the advantages and disadvantages of different systems in the national context and to decide how "best-practice" models can be transferred to each country's own system. When the history and identity of a country are taken into account, integrating aspects of other systems does not mean imitation but innovation. Accordingly, the participation of Hungary and Estonia in the SPES-NET project is very desirable.

This paper will put its main focus on the question "What can Western European vocational education learn from the reforms in the CEE countries?" To understand the impacts of vocational education reforms in CEE countries it is necessary to reflect on some background factors. Dealing with the question of mutual learning in the area of educational policies being applied in different systems may allow us to identify opportunities open to and problems facing vocational education that are common to CEE countries, and goals for vocational education that are common to CEE countries and the EU. We shall comment on the consolidation of vocational education in CEE

countries and its impact on "Western minds" from the Austrian point of view at the end of the paper.

2 Background: Reforming Vocational Education After the Change

Until the 1980s, in CEE countries the nature and forms of vocational education and training were determined by both ministries and big state-owned companies. They defined curricula and implemented vocational education programmes. Vocational schools were often part of the training system of these big companies, used to recruit and train their own workforce. Therefore, vocational education and training was characterised by a very high degree of specialisation and precisely defined vocational profiles for occupations within the big companies and the bureaucracy. This meant on the other hand that there was a long list of different vocations in the different countries. On the other hand there was a lack of well-defined job descriptions because the demand for vocational qualifications was politically controlled. Mobility and flexibility of workers were excluded both from vocational education and from economic policy. Lifelong learning and the provision of further education for the workforce had a totally different meaning in CEE countries and in EU member states.

After the political changes around 1990 one of the primary goals of educational policy was preventing the vocational education and training systems from collapsing. Apart from short-term crisis management, legal, financial and organisational conditions had to be created for ensuring the efficient operation of a market economy through provision of qualified labour. After the change of 1989/1990 two different strategies for reforming vocational education and training systems could be observed:

- reactivating traditional occupations (mostly skilled trades) from the pre-communist era, with the main attention focused on practical skills;
- retaining some aspects of communist-era vocational education systems, that is, the possibility of entering post-secondary education with vocational qualifications. Many countries followed the school-based model of vocational education and integrated into it different methods of practical training, such as simulation or authentic work experience in companies.

Most CEE countries were confronted with similar problems. The development of what are known as key qualifications (such as teamwork skills, creativity or responsibility) takes time. As a consequence, at least during the first years after the change foreign investors brought their own management staff to CEE countries. The lack of "economic key qualifications" is slow to disappear. There are still many problems concerning the infrastructure of vocational education and training in all CEE countries.

3 Common Opportunities and Problems of Vocational Education in CEE Countries

The systematic change in vocational education and training has led to growing higher education enrolment. The reasons are on the one hand better labour market opportunities for well-educated people (i.e. higher wages, lower unemployment rates, especially for young people with a tertiary degree), on the other hand the fact that young people often enter higher education because of being otherwise unemployed. Unemployment is a big problem among young people without higher education, older people with low or obsolete vocational qualifications, handicapped people and ethnic minorities (e.g. the Rom in Hungary).

Unemployment is partly a consequence of the liberalisation of the economy and legislative changes as regards labour. The new labour market laws which guaranteed the right to freely choose one's workplace and - in case of unemployment - to enjoy some benefits also regulate supporting policies and further education programmes intended to enable people to gain new qualifications. Unemployment is also a consequence of the too early specialisation stipulated by the curricula that affected a student's whole later career - often in an unfavourable way.

A look at the unemployment rates in CEE countries makes it clear that education oriented towards labour market needs is of growing importance. As a reaction to high unemployment rates in some countries, vocational education and training has become the focus of labour market programmes. The social partners play an important role in defining vocational qualifications (e.g. in Hungary). The following trends are supported by the social partners:

- the growth in higher education enrolment (both in school-type establishments and in training centres);
- young people's preference for education provided in school-type establishments to education delivered in training centres or in companies with high manual input (but they also prefer general education to specialised vocational education); and
- a shift of interest among young people from technical to non-technical skills.

These points, which are applicable in most CEE countries, allow us to observe that these countries' vocational education and training system are facing the same demand for more decentralisation and for teamwork between schools and public institutions on the one hand and labour market institutions, companies, trade unions and regional authorities on the other.

There are additional points to be observed regarding both CEE and EU member countries. Each country must make an independent evaluation of vocational education and its concepts (such as the transfer of systematic methods, know-how and knowledge in terms of "experience"). It may be mentioned here in passing that exchanging knowledge concerning the systematic changes taking place in each country's vocational education and training system is the main instrument for explaining and controlling qualifications on an international level.

4 Common Goals for Vocational Education in CEE Countries and the EU - a Result of "Growing Together"

The recent difficulties encountered by vocational education and training systems are very similar within CEE and EU member countries (of course to varying extent). Vocational education and training has to be adapted to labour market needs, especially to new qualification requirements and new occupations. At the same time, practically oriented curricula have to be introduced in addition to providing a general education.

This is accompanied by a development of new learning methods and the improvement of teacher education. The modernisation of educational institutions is a basic requirement of the "new" infrastructure of vocational education and training. The adaptation to labour market needs will also concern the mechanisms of evaluation and certification used in vocational education as well as - in times of uncertain labour market structures - education to increase flexibility and encourage self-employment.

Vocational education and training is a basis for lifelong learning. In most countries enrolment on further education courses is determined by the formal qualifications of the students. The higher is their level of formal qualifications, the higher is the rate of their further education enrolment. Therefore, vocational education and training must promote "learning to learn". Increasing possibilities of further and higher education for students with vocational qualifications are discussed all over Europe (e.g. the *Berufsreifeprüfung*; in Austria, the *Fachhochschulreife*; in Germany or the *Bac Prof*; in France).

This general trend towards higher education leads to a demand for vocationally oriented curricula in higher education. Post-secondary vocational education has to meet the needs of the labour market for occupations requiring higher qualifications. Especially some technical and economic qualifications are becoming increasingly important on modern and internationally integrated labour markets.

Lifelong learning is becoming more and more important. The CEE countries may be seen to have established certain priorities, such as increased financing of further education out of public funds and supporting further education programmes catering for all those on the labour market. Lifelong learning a) requires a range of different approaches b) must find new methods and therefore such things as "training the trainer", adapting curricula to current trends, innovative teaching methods and "learning to learn" have to be stressed and developed further.

Finally, educational research is facing new challenges. Quality control in vocational education is becoming more important than ever. Efficiency considerations are becoming a major focus for deciding and financing different policies to support vocational education and training. The development of job descriptions and curricula can be used as tools both for comparing vocational qualifications in different countries and for quality control. Although quality control is still in the process of establishing itself, improving vocational orientation and careers guidance is generally accepted as a method for preventing the high costs of "wrong-way" education.

5 Strengthening Vocational Education and Its Impact on the "Western Approach" - Concluding Remarks

The changes in vocational education systems in CEE countries should help us to rethink and reconsider the systems operating in the EU. CEE vocational education and training systems reveal the possibilities of but also the opportunities available for and the dangers involved in implementing reforms in existing vocational education systems. The challenge to vocational education and training research is the evaluation and introduction of new forms of and strategies for vocational education in a way which makes it easier for decision-makers to choose between different alternatives. Ensuring the transparency of vocational education systems and open access to them is another important challenge. International research centres such as the European Training Foundation (ETF) in Turin or different programmes such as TEMPUS PHARE and TEMPUS TACIS play an important role in this process. However, research should not depend only on those programmes.

A number of institutions in different countries are working on educational topics involving CEE countries. For example, the Austrian organisation *KulturKontakt* gives assistance to innovative projects which contribute to mutual cultural understanding, initiates projects covering pan-European collaboration in education and supports the exchange of information on education policy between East and West. Collaboration in the educational sector, particularly in the fields of school management and school development, foreign languages, vocational training, civic education and initial and in-service teacher training, has increased dramatically in recent years. A network of ten external communicators (from St Petersburg to Tirana) - the Austrian education coordinators - is being supported logistically and having its work supervised by *KulturKontakt*. With Austria's joining the EU the circle of available cooperation partners was extended. Joint initiatives with, for example, the Netherlands, Denmark or Germany as well as with international organisations (European Council, European Training Foundation, OECD etc) build on the bilateral activities, make use of the synergy created by them and contribute to Europe's integration in the educational sector.

The systematic changes in vocational education and training due to political and labour market changes in CEE countries have to be taken into consideration all over Europe. Because of the uncertainty about the new vocational education systems to be established in CEE countries, the scope of the reforms undertaken there is perhaps larger than that of those implemented in the established EU systems. Reforms and reform strategies can be integrated faster and are likely to be more far-reaching in CEE countries. This means risk and opportunity at one and the same time. If the strategic changes fail, the vocational education systems will be thrown into a crisis (as will the labour market as a whole). If they are successful, the national labour market will gain from improved vocational education.

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Comments on the Spanish Reforms and Lessons From Them for the Development of Upper Secondary Education in Europe

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The main foci of Spanish reforms over the last decade as outlined in Fernando Marhuenda's paper have been:

- to ensure that coherent compulsory education is available to all up to the age of 16;
- to rationalise and upgrade the system of post-compulsory vocational education and training into one system with a number of progression routes for those studying vocational courses who wish to continue into higher education as well as for those seeking employment; and
- to diversify the baccalaureate so that some routes within the baccalaureate system can lead to employment as well as to higher education.

With regard to questions of parity of esteem between academic and vocational education, the reforms do not fit neatly into any of the strategies identified by the Post-16 Strategies project. From the point of view of the four strategies identified in our final report (Lasonen & Young, 1998), the Spanish reforms can be seen as a combination of *vocational enhancement* and *linked* strategies. It is difficult to state confidently that one or the other strategy has been dominant. What is clear from Fernando Marhuenda's paper is that none of the reforms suggest that Spain is moving towards a unified system of either the Scottish or the Swedish type.

The rationalisation of the previously diverse and fragmented VET provision in Spain is being attempted through establishing a single system of vocational qualifications with several pathways. However, as Marhuenda shows, the old divisions between formal (or regulated) and non-formal (non-regulated) vocational education remain. The Spanish reforms can be seen, therefore, as a clear example of a *vocational enhancement* strategy or trying to 'improve the vocational track from within'. Parallel with these reforms of the system of vocational education Marhuenda reports on moves to diversify provision of general education so that students completing baccalaureates can either progress to university or become qualified or semi-qualified workers at 18. These aspects of the Spanish reforms that aim to provide links between vocational and academic programmes do not fit the *mutual enrichment* strategy as defined by the project; they are better described as a *linkage* strategy. Unlike the English approach to links which enable vocational students (on GNVQ courses) to have access to university, the Spanish reforms appear to give more emphasis to the employment prospects of academic (baccalaureate) students. Thus, those completing a baccalaureate who do not gain access to (or do not wish to proceed to) university can move to the higher-level formative cycle and go into employment as technicians. It is also possible for students who complete the intermediate formative cycle within the system of vocational education to join the baccalaureate route at 16+.

Marhuenda's report goes further than many of the case studies of the earlier project and illustrates some of the mechanisms of vocational enhancement developed in Spain, such as (i) greater vocational specialisation, (ii) better provision of vocational guidance and increased opportunities for students to make choices, (iii) a legal requirement for all students to have work experience.

On a broader policy level, the renewed emphasis on education/business partnerships, the importance of students gaining work experience while still at school and the Government's efforts to extend the involvement in education of employers and trade unions could all bring the general and vocational education systems closer together. If these policies are successful, they are likely to reduce some of the barriers to the unification of academic and vocational learning, should this become national policy in the future.

The report on Spanish reforms raises a number of key issues which our partnership only began to consider at the end of our project. For example:

- the training of teachers for their new roles in a more integrated system of post-compulsory education;
- the availability of work placements, especially when work experience becomes a legal requirement for all students;
- the need for those involved in qualification design and curriculum development to be aware of changing labour markets;
- the problem of exclusion (the report mentions that participation in post-compulsory education and training is under 50 per cent for some groups).

A final issue raised in the Spanish report that was not considered at all by the Leonardo partners is the impact of European Union policies on national reforms. It points out that at least in Spain there has been a danger of giving too much importance to EU directives, especially the 'homologisation of VET', and that this could get in the way of building on the strengths within the Spanish experience.

By the end of the Post-16 Strategies project the original partners had become aware that there were limitations to the four-fold typology of reform strategies that we had developed. One limitation that we stressed was its tendency to neglect differences within those countries identified with any one strategy. Spain is a good example of this problem. While it is undoubtedly accurate to describe many of the Spanish reforms as examples of a *vocational enhancement* strategy, there are few ways in practice in which the Spanish reforms have similarities with developments in Germany. This suggests that it may be necessary to introduce another axis of differentiation on which national reform strategies and systems can vary. It may be useful, for example, to distinguish between countries in which vocational education has a high status (Germany) and those like England and Spain in which it has traditionally had a low status; the two types of system are likely to generate very different vocational enhancement strategies.

A second problem that we raised in our final report was whether the distinction between *mutual enrichment* and *linkage* strategies was useful. We can draw a number of conclusions on this issue from the report on Spanish reforms:

(i) The view that countries tend to adopt a mix of strategies is confirmed.
(ii) National strategies are best seen as varying on a tracked/unified continuum.

(iii) It is not adequate to compare strategies only on a tracked/unification continuum.

Strategies also need to be compared on an additional axis representing the status of vocational education in the educational system as a whole.

Comments on "Reforms in Upper Secondary Education in Denmark - A Country Report"

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The figures showing what proportion of Danish students complete compulsory education, 99 per cent of the cohort, and how many of them continue their studies in the various youth ("post-16") education programmes, 95 per cent, indicate that in this respect the situation is very alike in the Nordic countries. The same can be said about the fact that all these countries are struggling to make vocational education more attractive to the youth. In Denmark in the 1990s we see an increase, at the expense of vocational education and training, in the numbers of those opting for general upper secondary education.

The report shows that general upper secondary education, the *gymnasium*, and initial vocational education, with their very dissimilar historical backgrounds and development, are still marked by their traditions. The consequence seems to be that even today these two educational systems are still isolated and separate from each other; they seem to function as parallel school systems which exert no influence on each other whatsoever, and further, they seem to have very little in common.

This is a situation very different from that in the other Nordic countries, where there has been a tendency to pull down the walls between these two educational systems, and to look at them as a whole. The report from Denmark underlines this difference between Denmark and the other Nordic countries, as the authors write that the other Nordic countries have put into practice 12 years of schooling for all, with increasing individualisation and flexibility *within existing educational structures*, while in Denmark vocational education and training has been differentiated in an increasingly systematic way with the result that students can choose between a number of *different forms of schools and traditions*, which they can today combine in a multitude of ways, as well as varying the time needed to complete a training programme.

The report makes it clear that there is a cultural tradition of great diversity in the system of vocational education and training in Denmark, and that the market mechanism regulates the allocation of public resources, depending on what the young people want. The assumption that this situation has contributed to the establishment of the many different forms of schools in the Danish VET system seems obvious.

The following are important characteristics of the Danish VET system:

- alternance between periods at school and periods in enterprises;
- VET provides not only vocational skills but emphasises also the acquisition of transversal and general skills within a flexible system which allows for different access routes and for transition between lines;
- the social partners have a comprehensive influence on the VET system on all levels.

The 1989 VET reform enforced these characteristics. Furthermore, Law 210 led to a far-reaching devolution of powers, with vocational schools gaining much more autonomy than they had had before.

From the report we find that there are approximately 125 vocational schools in Denmark, and that the total number of VET courses is approximately 90. These VET courses are expected to offer genuine opportunities for continued training, and the courses must provide both general education and occupational training. The time spent on general subjects during a four-year VET course seems to be approximately 17 per cent of the total teaching hours.

In order to tackle the problems of social exclusion, particularly dropping-out problems in youth education, where the drop-out rate was roughly 25 per cent in 1993, there are, besides the VET courses, established school offers for slow learners, the less school-oriented students, the EGU (basic job courses). The EGU Act makes it possible to organise courses according to the wishes and abilities of the individual student. The EGU courses take two years to complete and include mainly practical training.

There are some disadvantages with these courses. First, the social partners, which have a great influence on the VET courses, do not take part in the EGU programmes. Secondly, as the EGU courses are outside the VET programmes, they do not confer any recognised qualification to the student, and there is neither any national occupational standard nor any nationally approved educational standard behind the EGU programmes.

The vast number of VET courses mentioned above, approximately 90, has caused problems in Denmark, as it did in Norway before Reform -94. The problem is that the entire educational system becomes very complicated and individualised, and therefore difficult to understand; it was transparent neither to the student, to the parents nor to the enterprises.

These problems seem to be taken seriously as the quotation below proves (from the chapter The Political Agenda in Danish Post-16 Education Policy in 1998):

"A third reform initiative will involve making VET provision more coordinated and transparent. A new proposal for a reform of initial VET provision covering the technical VET programmes has just been tabled. There will be markedly fewer and broader admissions channels into the VET system. Today there are 90 different VET programmes from which young people leaving compulsory school must make their choice, which makes the process much too complicated."

As regards the EGU courses, I can see a problem here. Bearing in mind that the reason behind the courses was a wish to secure the transition to the labour market of the less school-oriented students, and in this way try to solve the problems of social exclusion and unemployment among young people, and keep the drop-out rate as low as possible, I can picture the following dilemma:

If the less school-oriented students are to be persuaded to stay on in school, the demands made on them must be kept low because otherwise they are likely to quit and become drop-outs. But if a low level of educational demands is going to be the main model, then these students will have problems in finding employment and therefore they are likely to become socially excluded after their two years of EGU schooling.

As a consequence, the dilemma seems to be that whether the demands on these students are high or low, they are going to be the losers in this system.

The report shows that there were attempts to do something to this problem in 1998, as shown by the following statements in the Danish country report:

"The main policy goals in post-16 education in Denmark is a sharper focus on 'employability'- the structure of educational provision for young people must lead to recognised qualifications."

Another central factor is that some cleaning up is necessary: the system must "go back to basics" in the sense that the new separate programmes established in the nineties (the EGU scheme and the many "bridge-building" activities) will be integrated into the ordinary structures of the mainstream system - that is, flexibility and individualisation must be increased within the traditional VET programmes, as has been done in the other Nordic countries.

What about parity of esteem for vocational education in Denmark?

I have not been able to find this phrase, parity of esteem, used in the reports" formulations concerning the objectives and aims of the Danish VET. The following formulations are found:

- In the chapter Main Targets of Youth Education Policy in Denmark in 1993-1998: Education for All:

"Since 1993, the overarching goal for educational policy in Denmark has been the provision of education and training to all young men and women, with an ambition to reduce the rate of dropping out of education and training to 5-10 per cent from the 1993 rate of some 25 per cent."

"The overall target of [Education for All] has been to create a more flexible, efficient and student-centred system of youth education in the years up to 2000"

"Education for All can be seen as a preventive strategy. The aim is to stimulate success in youth education and avoid unemployment for young people by means of educational innovation."

- The authors of the Danish country report have this to say about parity of esteem:

*"... the challenges related to parity of esteem between general upper secondary education and vocational education and training have not been solved in Denmark 2 in fact, they may even have been aggravated. While the general upper secondary school (*gymnasium*) has remained stable and represents continuity, the extreme innovative activity around the vocationally oriented programmes has created a caleidoscopic variety of such courses."*

- Further down in the same page there is this passage about the VET courses:

"The focus has been very much on constructing alternative programmes appealing enough to attract the attention of the academically weaker groups of young people and persuade them to stay on in education."

The report says very little about esteem for vocational education, obviously because the makers of educational policies and the educational authorities do not mention the issue. If we take a look at the ideas presented under the chapter heading The Political Agenda in Danish Post-16 Education Policy in 1998, we see that Danish vocational education and training, in the form that it is planned to take in the future, is coming closer to the systems in the other Nordic countries, but nothing is said about equality of esteem between general upper secondary education and vocational education and training. The main distinctive feature of Danish post-16 education policy making seems to be that when youth education

is being discussed and planned in Denmark, academic and vocational education are still considered separately. Apparently it is not felt fruitful to engage in umbrella thinking of some kind, where all post-16 education would be taken into account.

Were I, with the above description as a point of departure, to try to locate the Danish school system in the continuum of the strategies used in the analyses of the Post-16 project, I would be most likely to characterise it as a tracked system with a strong emphasis on enhancement in vocational education and training.

PART III

OLD PARTNERS' CONTRIBUTION TO THE PROJECT

PART III.B

OLD PARTNERS' PAPERS ON FORGING LINKS BETWEEN EDUCATIONAL ESTABLISHMENTS AND ENTERPRISES

On-the-Job Training – A New Development Project in Finnish Vocational Education

Ulla Numminen
National Board of Education

1 Development Policies

Several projects for developing vocational education are in progress in Finland, approved by the Government as part of the overall aims set for Finnish education for the years 1995-2000 (Ministry of Education, 1996). For this paper I have grouped the projects as follows:

Qualification Structure

- restructuring vocational qualifications by 2000 and targeting on 3-year programmes
- including a minimum of six months of on-the-job learning (workplace-based training) into all qualifications
- combining school-based training and apprenticeship-type on-the-job learning in three-year programmes

Study Programmes

- promoting the construction of personal study programmes so that students are provided with an opportunity to take courses taught in a number of different schools

Interinstitutional Cooperation

- expanding inter-school cooperation in a way that enables young people to make maximal use of available study options while studying for a given qualification. Cooperation is both horizontal, as between an upper secondary school and a vocational institution and more generally between these two types of school, and vertical, as between secondary education institutions on the one hand and universities and AMK institutions (Finnish polytechnics) on the other.

2 New School Legislation

New school legislation came into force in Finland on 1 January 1999. Under it the Finnish model of secondary education will rest on a strong bipartite tradition consisting of a general upper secondary school on the one hand and of vocational education and training on the other; however, the law also obliges educational establishments to cooperate (network). Curricula will be revised with a view to enabling students to conduct personally designed studies including, if necessary, courses offered in other types of educational establishment. Students will be allowed to incorporate studies completed in other establishments into their final qualifications. The new legislation further provides students with a right of appeal in these matters.

Central reforms implemented in the 1990s include administrative decentralisation, dismantling of centralised regulations and a reform of the state grants system. In

compensation, greater decision-making powers have been devolved to the providers of education, the municipalities and federations of municipalities, as well as to the private providers.

3 Development Projects

In the following two Finnish SPES-NET projects will be discussed.

1 Interinstitutional Cooperation (Networking)

As mentioned above, local/regional interinstitutional cooperation is part of the new school legislation. Networking was already an essential component of the youth education experiment, leading to a number of practical action models for network-based education were developed. The youth education experiment was Finland's contribution to the Post-16 Strategies project, representing the strategy of mutual enrichment. It has been described in the reports of the project (Lasonen, 1997; Lasonen & Young, 1998; Numminen & Virolainen, 1996; Virolainen, 1996).

2 Projects for Developing on-the-Job Training

The Finnish and other Nordic models of vocational education have all been school-centred. Teaching has been delivered virtually exclusively at school, with little on-the-job learning, at least when compared to the German model of vocational education. Apprenticeship training is another form of workplace-based training that has been fairly rare in Finland. Accordingly, the Finnish vocational education system has been criticised for its weak links with working life. Representatives of working life have participated in the quantitative planning of vocational education and in the development of educational structures and individual curricula as members of various consultative committees and working groups, but they have made little contribution to the training itself, with the exception of very sporadic provision of apprenticeships.

Those arguing for the need to create stronger links with working life in learning have pointed out that that purely workplace-based training will give students only narrow and transient enterprise-specific knowledge and skills (Rinne, 1997) that will quickly go out of date as technology advances or the enterprise shifts its line of business. In exclusively school-based training, again, the problem is that of instruction out of touch with working life; such education runs the risk that the knowledge and skills learned at school will prove useless at work, particularly in times when work routines and production practices are changing.

There is an on-the-job learning project underway in Finland to develop what are in the Finnish context new on-the-job learning practices: *incorporating on-the-job learning into all curricula*.

All vocational curricula will by 2000 include an at least six-month on-the-job learning period. For this purpose regional pilot projects were launched in 1997 with the aim of identifying any problems involved in the reform and developing solutions to them and disseminating ideas to other fields. At the same time, some of the qualifications now requiring two-year studies will be extended to three-year

programmes through the addition of a third year to be spent in apprenticeship training. Currently, a few thousand training places are involved in the programme.

Concurrently with the decision to improve links between education and working life by transferring some of the instruction previously delivered at school to the workplaces, a new term, "on-the-job learning", was adopted to replace "practical training", the objective being to emphasise the perspective of learning as the focus of the reform. On-the-job learning is being developed to the three;

- broaden contacts and interaction between school and working life;
- deliver vocational education in a varied range of learning environments; and
- enhance the quality of vocational education.

Finland has no tradition of workplace-based instruction; instead both the educational establishments and the workplaces (except for some workplaces running apprenticeship programmes) are faced with a new situation. As a result, development work must begin from scratch. The following is a list of target areas in developing on-the-job learning. On-the-job learning will affect the following aspects of education and training:

1) qualification structure;
2) curricula; and
3) development of teaching methods;
4) practical arrangements, such as finding workplaces willing to offer placements, negotiating contracts and organising the delivery of training in the workplaces;
5) further training of teachers and training of workplace supervisors. (Figure 1)

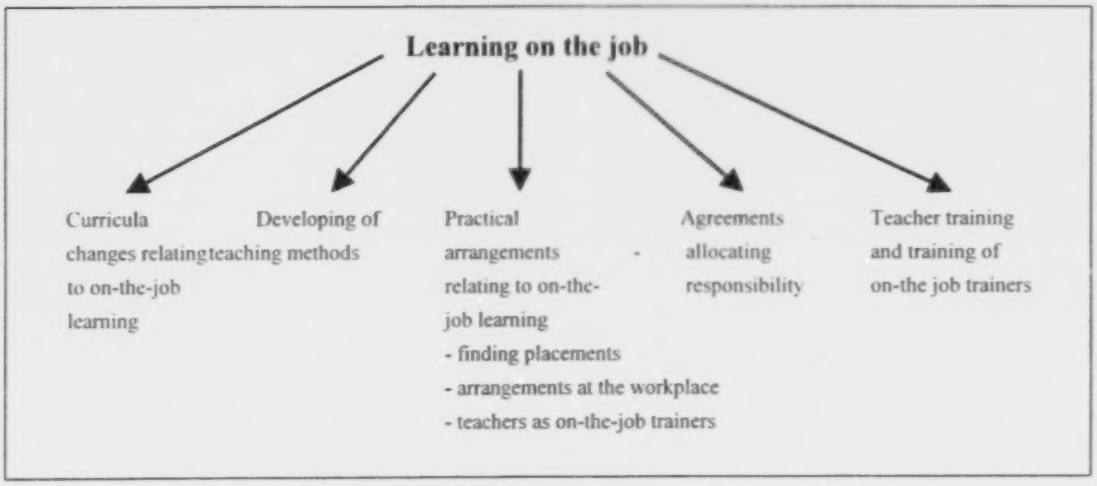
Learning on the job
Curricula changes relating to on-the-job learning
Developing of teaching methods
Practical arrangements relating to on-the-job learning
- finding placements
- arrangements at the workplace
- teachers as on-the-job trainers
Agreements allocating responsibility
Teacher training and training of on-the job trainers

Figure 1. On-the-job learning - areas of development.

The next section will outline the ideas underlying the developmental projects, where the focus lies on new conceptions of learning (constructivism) and on varying learning environments to promote learning.

4 Underlying Ideas: School and Enterprises as Learning Sites

School is the only organisation specialising in the provision of instruction and education. The function of an enterprise is producing commodities, services and non-material goods, such as planning and design, computer software and so on. It is true that even business life has, as a result among other things of continuous and rapid change, begun to stress learning as a characteristic of organisations (Senge, 1990), and developing enterprises have begun to see learning as a tool of strategic management.

The action models and action culture of an educational institution are in many ways essentially different from those of an enterprise. An enterprise or other workplace has its own goals and logic of action, and it is not necessarily easy to fit instruction and education in. Accordingly, the central question is: How can we make teaching and learning part of an environment with totally different values and action culture? How will the cultures of school and enterprise discover ways to work together? How will they be able to find a shared language? Or will the result, instead, be a clash of cultures? The following table compares the operations of a school and an enterprise.

Table 1. *Characteristics of the educational establishments and an enterprise, and nature of activities; comparing points of departure in arranging on-the-job training.*

Target of comparison	Educational establishment	Business enterprise
1. Regulation of activities	Curriculum regulated (by the government)	Market regulations
2. Objective of activities	Teaching, learning, growth and development of young people	Money
3. Target of activities	Students (also themselves agents)	Goods, services, products
4. Organisation of activities	Activities organised to serve teaching Process-centred (for the most part)	Activities organised to serve production and its effectiveness
5. Nature of activities	Institutional continuity, a time-span of several decades	Results-centred
6. Continuity of activities		Developmental span of an organisation varies, often very short
7. Products	Teaching	Goods, services,
8. Quality criteria: - process criteria - results criteria	Good learning environment Occupational qualifications, securing a job	Effective production, minimisation of errors Customer satisfaction, good product, good profit
9. Values	As defined by society, national core curricula and each individual school, for example educational equality	Values defined by the company, vary
10.Standards and norms	School rules and regulations	Company rules and regulations

We are accustomed to consider learning an activity linked exclusively with school. Several researchers have criticised school-based learning, speaking about school learning, the hidden curriculum and so on. The central point of such criticism is that much of the outcomes of teaching delivered at school will remain behind its walls, be useless in working life, and students will be unable to readily transfer their knowledge and skills to other contexts. This is largely because learning research has only recently begun to introduce new tools to replace traditional behaviourist instruction. As compared to school, on-the-job learning is a new kind of learning situation, context, that may require new interpretations of learning or the adoption of new foci (constructivism, the constructive nature, situatedness, authenticity of learning, solving complex problems etc).

5 Developmental Tasks of the Pilot Projects

On-the-job learning represents a developmental project shared between educational establishments and workplaces. Below is an outline of some of the developmental tasks that have been set to the pilot projects.

1) Developing Institutional Curricula

When a part of teaching is transferred to the workplace, the educational institution must consider its curriculum from a new perspective. The problem cannot be solved by attempting to go on as before, teaching at school everything previously delivered here; instead it is necessary to consider which knowledge and skills are best learned at school and which are best acquired on the job.

The strengths of an educational establishment include mastery of a study field as a whole, while enterprises as a rule represent only a part of the domain covered by a qualification, but have the advantage of a good practical mastery of their particular area. The tasks of a school also include guaranteeing students' practical readinesses, core qualifications and basic skills. Specific tasks and contents may be learned in depth on the job.

One of the results of the new situation is that students' study experiences vary, they learn different things and the contents of the qualifications they complete may involve a degree of specialisation. Thus, students do not leave school with an equal mastery of all the aspects of a qualification but instead each has their own strengths stemming from their personal work experience. Apart from these specific skills they have also learned how to socialise themselves into a new workplace, act in a working community, communication and other basic skills.

Solving the problems involved in designing a curriculum also includes consideration of how to schedule on-the-job learning in relation not only to the objectives of and the study times set by the curriculum but also the duration of the on-the-job learning periods. Such considerations must be based on the nature of the work processes of the given field, whether short- or long-term and so on. Fairly long on-the-job learning periods are suitable when the emphasis is on the work process as a whole and on models of learning to become a member of a work community. Short periods in

several enterprises will teach a student several specific skills, but may not give them a full picture of the work process as a whole and as a continuous operation.

2) Developing Teaching Methods and Learning Environments

It is possible to consider an enterprise or other workplaces also as different learning environments. Here the most central problems may be assumed to include finding ways of learning how to cope with the open and complex situations that are becoming increasingly common in working life. At least the following questions should be addressed:

- Which approaches to teaching/learning will be helpful in on-the-job learning?
- How can the operational environment of an educational establishment be made more open so that it will provide models for the open and complex situations that students will encounter at work?
- How can the tasks and environment of a workplace be adapted to promote student learning and what role should the enterprise play in this context?
- What kind of readinesses and action models should be targeted? How can we ensure that the targets will be achieved? How should students be trained for on-the-job learning?
- How should students' learning assignments be defined, how should students be encouraged to follow and evaluate their on-the-job learning? What kind of methods should be developed (learning diaries, feedback and reflection etc)?

3) Finding Placements

Finding workplaces willing to offer placements is a big task, particularly at a time of fairly high unemployment. A school may not consider all workplaces good enough or of a sufficiently high standard, but the great majority of students' future places of work will be similar perfectly ordinary enterprises employing no more than a few persons. The preconditions of learning must be organised together with the workplace. The questions to be addressed include:

- How will the workplaces operating in the given area be charted and how will their suitability as learning environments be assessed?
- Will the enterprises or the like be able or willing to involve themselves in long-term learning networks or relations?
- How shall the advantages that the enterprise will gain from organising instruction be evaluated and justified? What kind of input will be required?

4) Planning on-the-Job Learning in Cooperation With the Staff of the Enterprise or Other Workplace

All the tasks performed in enterprises will not be suitable as exercises for students because they are too demanding, involve quality criteria and so on, making it necessary to discuss task selection with the enterprises. The planners must find out whether some of the tasks could be slightly adjusted - without disturbing too much the enterprise's

daily operations - as learning assignments that would enable students to train for some of the goals foregrounded in their qualification requirements.

5 Further Training of Teachers and Workplace Personnel

An aspect of development work is deciding about the further training needs of teachers and workplace personnel, finding out what kind of demands on-the-job learning will make on teachers and workplace supervisors.

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Links Between Educational Establishments and Business Enterprises in Norway

Kjell Andersen
Agder College

1 Introduction

Cooperation between the different organisations that are concerned with vocational education in Norway, and especially with the apprenticeship system, takes place on the following three levels:

- national level
- regional or county level and
- local, school and workplace level

The Upper Secondary School System

First, let us have a look at the organisation of upper secondary vocational education in Norway. As shown in Figure 1, students spend two years in school, where they take a Foundation Course and an Advanced Course I. After completing them they can choose between one or two years of training at a workplace as an apprentice. If a student chooses two years of apprenticeship, half of the time will be spent in productive work, for which the apprentice is paid.

The upper secondary system education in Norway after the introduction of Reforms-94.

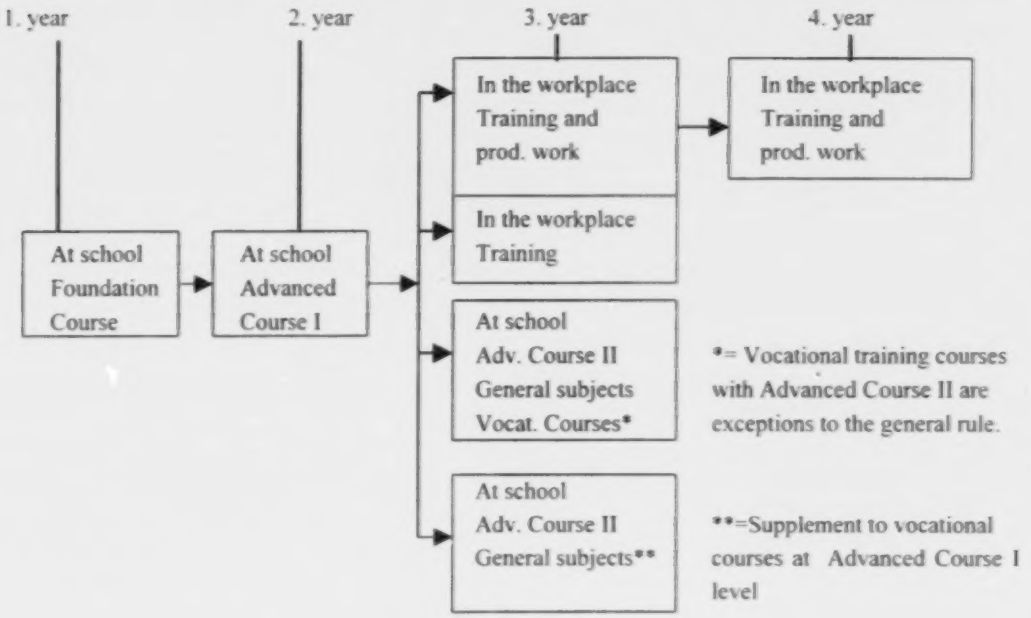
1. year
2. year
3. year
4. year
At school Foundation Course
At school Advanced Course I
In the workplace Training and prod. work
In the workplace Training and prod. work
In the workplace Training
At school Adv. Course II General subjects Vocat. Courses*
At school Adv. Course II General subjects**
*= Vocational training courses with Advanced Course II are exceptions to the general rule.
**=Supplement to vocational courses at Advanced Course I level

Figure 1. Shows the options available to vocationally oriented students.

The Apprenticeship System

Reform -94 gave students *a statutory right to three years of secondary education*, including an apprenticeship. This implies that the school authorities on the county level, whom the law has given the responsibility to see to it that the students' rights are respected, have to find a sufficient number of apprenticeship places that accord with the wishes of the students. If the places cannot be found, the authorities must, as exceptional provision, organise this part of the students' education in school.

Here the Norwegian system faces a problem and a dilemma, because while on the one hand students have a right to an apprenticeship place, on the other hand enterprises have no obligation to accept apprentices and train them.

It is therefore crucially important that county-level school authorities are able to forge links with the labour market so as to persuade and motivate enterprises to play an active role in training apprentices. In the past few years the Ministry of Education has been compensating the enterprises economically for taking in apprentices, in fact providing a sum of money equivalent to the costs of an upper secondary school student over the same period of time. The importance of close contact and cooperation between the school authorities on the one hand and the workplaces and their organisations on the other on all the levels mentioned is clear to all who are working in this field.

In the following we will take a closer look at the formal cooperation structure in the vocational education system in Norway, focusing on institutions with responsibilities regarding upper secondary vocational education.

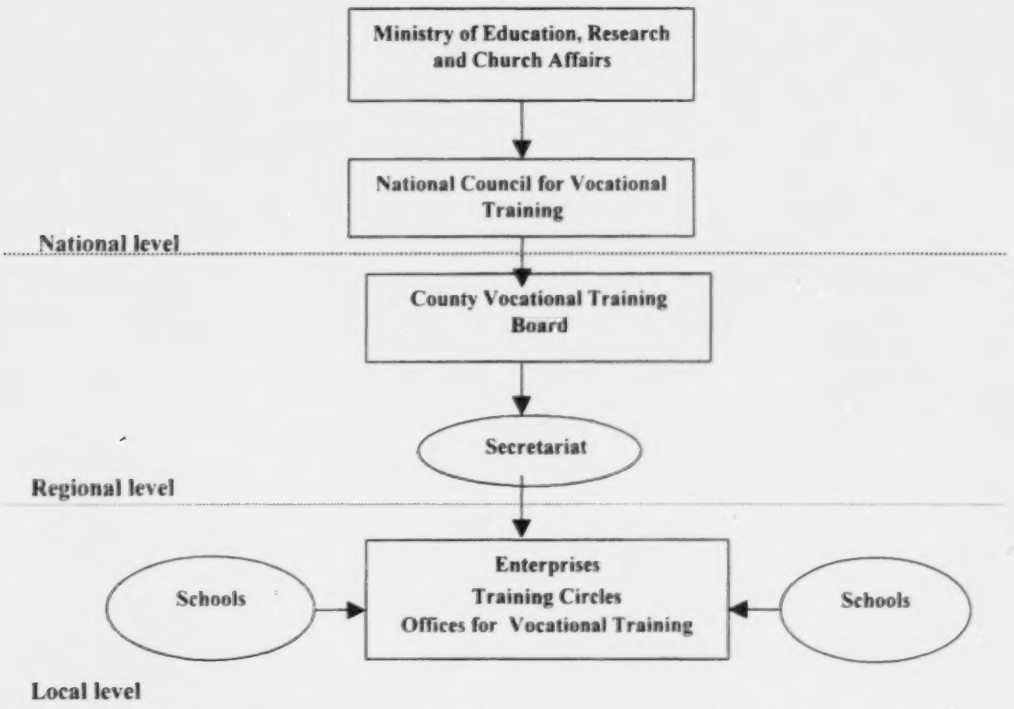

Figure 2. Administrative of the upper secondary education in Norway.

2 Cooperating Institutions

National Level

On the national level we have the Ministry of the Church, Education and Research, and the Council for Vocational Training at Workplaces. (Figure 2)

The Council advises the Ministry on all matters that concern vocational education in Norway, and generally carries out all the assignments given to it by the Ministry.

The Council consists of representatives of working life and the Ministry. More than half the members must represent working life.

County Level

Here we have the Municipal Committee for Vocational Education. This is a very important committee in the vocational education system, not least in relation to apprenticeship training. Formally, the law (Article Seven of *Lov om fagopplæring i arbeidslivet* or the Vocational Training in Working Life Act), states that there must be a County Committee for Vocational Education in every county. Acting on behalf of the county (*fylkeskommunen*), the Committee has administrative responsibility for the practical application of the law inside its own county. There are seven members, two representing employers' organisations, two employees' organisations, one representing the apprentices and, lastly, two representing the county .

The Committee has its own secretariat (see Figure 2). It is this secretariat which has daily responsibility for establishing enough apprenticeship places, and for ensuring that the law is carried out properly. This means that the secretariat must ensure that the law is followed in the enterprises, for instance that a contract between an apprentice and the enterprise is signed, and that the training provided is in accordance with the law mentioned above.

Another important assignment for the secretariat is handling students' applications for apprenticeship places and trying to find them such places, and lastly, when a place is found, seeing to it, as was already mentioned, that a contract is signed. When all the students have received their offers and have started the training process, the secretariat will monitor both the workplace and the apprentices throughout the training period.

All this means that as far as apprenticeship places are concerned, there is no formal contact between the individual schools and the enterprises. All contacts go through the county-level school authorities, the secretariat of the County Committee for Vocational Education.

On the Local Level

One of the relatively new cooperation measures in which the secretariats have played an important role is the establishing of Training Circles and Offices for Vocational Training on the local level (see Figure 2). This is organised cooperation between two or more enterprises which have a common need for trained workers, or have decided that they will go into apprenticeship training together and in cooperation, in order to help society with the apprenticeship situation, but also in order to secure their own enterprises trained and certified workers in the future.

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A training circle receives a certain number of apprentices from the secretariat, organising independently their training in the enterprises belonging to it. As a rule, the apprentices circulate between the partner enterprises according to a certain plan.

Often such circles or offices have a teacher, paid by the partner enterprises, to take care of the necessary secretarial work on a part-time basis. The municipal-level secretariats mentioned above provide support and help in establishing and running the circles and offices.

On the local level there is little or no formal organised contact between the apprenticeship enterprises and schools. This does not mean that there is a complete lack of contact and cooperation between the schools and the workplaces, only that that the initiative in cooperation is placed on each individual school teacher and each instructor in the enterprises that take on apprentices.

The authorities are very much aware of the importance of close cooperation and contact between teachers and instructors and have adopted this as a point of departure for work with the apprenticeship system in Norway in the future. The plan is to bring teachers and instructors together on courses of various kind, so that they can communicate more easily and learn from each other, and are in this way enabled to plan school-based teaching and learning and workplace-based training as one unit. Those involved believe that the total school and training situation will thus be made more meaningful to the students, and that this will also increase the quality of vocational education as a whole.

3 The National Prestige of Vocational Education

If we take the year 1996 as the point of departure, national-level figures show that 54% of the age cohort wanted to enter one or another upper secondary vocational education programme. This is a rise from 1994, when the reform started, when 46% of the cohort had the same wish.

Overview of College-Enterprise Links

Stuart Niven & Gordon Paterson
Clydebank College

1 Introduction

As a further education (FE) institution, Clydebank College's aim is to deliver high-quality training to individuals seeking employment and to continually develop the skills of those within employment and so increase the effectiveness of the workforce and the competitiveness of enterprises. This can only be realised if the College develops a close working symbiosis with enterprise, identifying needs and responding to demand. The elements of that symbiosis sketched out in this short paper are not in any way exhaustive but are simply to give an outline of the extent of the relationship.

2 Enterprise Involvement in the Provision of New College Courses

The process followed by FE colleges in Scotland requires that enterprise representatives actively identify the needs of their occupational sector when new courses are being developed and approved for delivery. Representatives of industry sector boards will usually be consulted through validation (of new programmes) and approval (for our College to deliver existing programmes) boards - e.g. the Hotel and Catering Industry Management Association (HCIMA) ensure relevance in the content of College programmes such as the National Certificate in General Catering and the Higher National Certificate in Professional Cookery, etc.

3 Enterprise Involvement in the Delivery of Existing Courses

Every course that is delivered within an FE college is monitored by a course team. The constitution of that course team will usually involve the lecturers that deliver the programme, assessors that administer its assessments, internal verifiers that monitor the quality standards of delivery and assessment, students' representatives, representatives of other institutions (often from a university department into which the college course provides progression), and representatives of relevant occupational areas from local enterprise. As an example, the Hairdressing course team includes members from the Dermatology Department of the Western Infirmary (linked with Glasgow University) which has helped the College establish a progression from National Certificate in Hairdressing to the Higher National Diploma in Trichology, and from local hairdressing salons.

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4 Enterprise Creation

Many College students (particularly, although not exclusively, from course areas such as Catering, Construction, Information Technology, Hairdressing and Beauty Therapy) aspire to self-employment. The College has developed its own Enterprise Centre to provide information and advice to students who wish to develop their own enterprises on graduating from the College. A close working relationship has therefore been established between the College Enterprise Centre and local Enterprise Trusts which provide access to 'start-up' funding and assistance with premises and a necessary plan.

5 Training and Consultancy for Enterprises

A large part of the College provision is to support the competitive edge of local enterprises by updating the skills and qualifications of their employees. This is often done through negotiated reskilling programmes, often preceded by an analysis of needs. In addition to improving the skills base of, for example, employees in an engineering company where the employers are looking to improve deployment and efficiency of their workforce and so require a multiskilling programme, the College provides specific training to meet new legislative requirements (e.g. National Executive Board of Safety and Health Certificate) and middle management training (e.g. National Examination Board of Supervisory Managers). Many of the enterprises with whom the College currently works are listed on the attached page.

6 Supporting Enterprise Development in Local Schools

The College plays an active and integral role in supporting enterprise development in local schools through, for example, the Education-Business Partnership where, as a board member along with the Local Enterprise Company and local businesses, the College develops and supports a strategy of enterprise involvement in secondary schools (Industry Awareness and Business Masterclass events etc), and the Curriculum Centre (along with the Construction Industry Training Board) for local primary schools.

Commercial Contacts:

The College has a number of written contracts with companies and a broad range of operating agreements at course levels.

Company:

Canberra Garage
Castle Garage
Glens Garage
Auto Craft Engineers
NPG Motors
Eastfield Motors
Rainbow Car Wash
Andrews Garage
Townend Garage
Lindsays Garage
Fairways Garage
A Murray
Mitchell's Self Drive
Mac Connachies Tyre Service

Old Mill Garage
Tops with Lorretto
The Cutting Company
DMG Hair Studio
John & Co
Beetlemania
J Fonaldson
McFarlane Engineer
Europcar
Head Office
Russel Heancy
Camerons Hair Design
St Margaret's Hospice
Brendan Pettit
Leonards
Jackies Hairdressers
Harveys
Reflections Hairport
In-tune Garage
Helensburgh Tyre & ExhaustJames
Falmuir Motors
Weirs ToursPelo Hair Salon
Partners Hair
Exit Hair
Burnhill Motors

Consultancy Training Service Contacts:

The College has a number of written contracts with companies and a broad range of operating agreements at course levels:

Company:
Motorola (East Kilbride)
National Semi Conductors
Clydebank Shopping Centre
SCI (Irvine)
Label Graphics (Glasgow) Ltd
Compaq Computer Manufacturing Ltd
UIE Scotland
Clydesdale Bank
East Dunbartonshire Council
West Dunbartonshire Council
J & B (Scotland) Ltd
Kvaerner Energy Ltd
Boots Contract Manufacturing

PART III

OLD PARTNERS' CONTRIBUTION TO THE PROJECT

PART III.C
OLD PARTNERS' DISSEMINATION PLANS

SPES-NET Austria: Preliminary Plan

Stefan Humpl and Jörg Markowitsch

Institute for Industrial Sciences
Vienna University of Economics

Internal Announcement for SPES-NET Austria	The internal announcement for SPES-NET Austria is just now being carried out in *bildung aktuell*, IWI's Austria-wide periodical for educational experts. About 2.000 experts especially in vocational education and training will be informed.
Note	We will present the first results of the internal announcement at the summer seminar in Jyväskylä.
Time	May 1998
Interviews with educational policy makers	The interviews will address the most important questions involved in establishing SPES-NET Austria: ➢ How will educational institutions benefit from SPES-NET Austria? ➢ What will the policymakers do to establish the relevant post-16 education strategies in vocational education and training systems in Austria? ➢ What kind of possibilities for co-operation between schools and enterprises can be provided by the policymakers?
Time	May 1998 - June 1998
Creation of a home page for SPES-NET Austria	The creation of a home page for SPES-NET Austria on the World Wide Web will not only provide interested people with information about SPES-NET Austria and the European SPES-NET project but also serve as a platform for information exchange and for innovations in vocational education and training.
Note	We hope to discuss some important points about the creation of a home page at the summer seminar in Jyväskylä: ➢ Which SPES-NET partners will install a SPES-NET home page? ➢ Will there be any international links between the home pages? ➢ Are there plans to extend the current SPES-NET home page by adding links to all partners?
Time	July 1998 - September 1998

Article series in an Austrian newspaper	A series of articles about particularly successful cases of co-operation between schools and enterprises will be placed in a major Austrian newspaper (*Der Standard* or *Kurier*). Positive reports in the mass media will reward both schools and enterprises for innovative forms of co-operation in vocational education and training.
Note	The plan calls for support from the Austrian Ministry of Education and Cultural Affairs. If no support is made available, it is uncertain whether the plan will be realised.
Time	September 1998 – January 1999
Press releases and press conferences	Interim results of SPES-NET and SPES-NET Austria will be made public through press releases. Important results and activities will be presented and discussed in press conferences. The importance of vocational education and training as well as of the post-16 education strategies will be explained to a broad public.
Time	June 1998 – December 1999
National workshops with SPES-NET Austria partners	Establishing SPES-NET Austria on a regular basis after 1999 will require personal contacts between SPES-NET partners. A national workshop will promote such contacts. In addition, it is planned to intensify exchange programmes and increase opportunities for co-operation between schools and enterprises. The question of the continuous maintenance of SPES-NET Austria should be solved in the workshop.
Note	We hope to initiate SPES-NET Austria on a regular basis with all national partners at the workshop.
Time	June 1999

SPES-NET Finland: Dissemination Plan

Ulla Numminen
National Board of Education

1 Background and Points of Departure

Finland was a partner in the Leonardo da Vinci project Post-16 Strategies (1996-97), exploring the strategies for developing upper secondary education in Europe. The Finnish contribution to the project was *Nuorisoasteen koulutuskokeilut* (The Upper Secondary Education Experiment). The Institute for Educational Research of the University of Jyväskylä acted as the coordinator of the Post-16 Strategies undertaking. Two experimental units in the upper secondary education experiment (Salo and Tornio) participated in the study visits organised as part of the project. The other participants included researchers and representatives of schools. The National Board of Education (NBE) took part as an observer.

Sharpening Post-16 Education Strategies by Horizontal and Vertical Networking or the SPES-NET (1998-99) is a project for disseminating the findings of the Post-16 Strategies project among 13 participating countries, of which 7 were already partners in the Post-16 Strategies project, while 6 are new partners.

2 The Aim of the Project

The aim of the SPES-NET and the Post-16 Strategies projects is to identify the strategies used to increase parity of esteem for vocational education and to spread information about it in Europe. Of first importance among the results described in the report of the Post-16 Strategies project were the interrelations between general and vocational education, embodying four different strategies of development: vocational enhancement, mutual enrichment, linkages, and unification (Lasonen & Young, 1998), with the Finnish model representing the mutual enrichment strategy.

The chief aim of the SPES-NET project is to study the four developmental strategies identified by the Post-16 Strategies project in new surroundings, such as the new participating countries (Belgium, Denmark, Estonia, Greece, Hungary and Spain) and particularly countries in Eastern and Southern Europe. The projects are designed to produce information useful in evaluating and improving existing strategies and in assessing how suitable and functional the strategies are for developing education in the countries concerned. Another aim of the project is to increase knowledge and stimulate discussion about educational development in these countries. An issue of first importance in these discussions is parity of esteem for vocational education.

As a Finnish partner in the SPES-NET project the NBE has the following tasks:

- giving a description of how the relationship between education and working life is organised in Finland;
- stimulating discussion between researchers, educational experts and policymakers in Finland about the recent trends in the development of upper secondary education in European countries and promoting interest in research on upper secondary education,

especially from the point of view of parity of esteem; and

- monitoring and promoting the implementation of the results of the Upper Secondary Education Experiment, now when the new educational legislation is coming into force, with a view to gathering more information about the mutual enrichment of academic and vocational education.

3 The Finnish SPES-NET Programme

A Collecting and Exchanging Information

The Finnish projects for developing upper secondary education will be introduced to the other SPES-NET partners. Information about similar projects in other countries will be collected to help development work in Finland. The Finnish SPES-NET development projects to be presented comprise

- developing links between education and working life, particularly projects for developing on-the-job (workplace-based) learning
  Date: June 1998 (at the Jyväskylä workshop)

- a reform of the system of vocational qualifications
  Date: 1999

- Local and regional cooperation between educational institutions (connected with the mutual enrichment strategy as defined by the Post-16 Strategies project). Overall revision of school legislation and monitoring of its repercussions on upper secondary education, particularly on cooperation between educational establishments. The experiences gained from the youth-level education experiment and other innovations linked with networking between schools.
  Date: June 1998 (at the Jyväskylä workshop)

B Initiating and encouraging discussion about the European dimension in developing upper secondary education

While revising upper secondary education (general and vocational upper secondary education) and their curricula in 1998-2001, the NBE will also analyse and evaluate other models for developing upper secondary education in Europe. We shall assess what we might learn from others and what they might learn from us. These actions target the decision-makers, the administrators, the researchers, and the representatives of the various schools.

- The introduction of the new school legislation, especially the in-service training of principals and teachers organised by the NBE, will include a European dimension. For this purpose, transparencies and other materials will be prepared.
  Responsibility: NBE
  Date: 1998-1999

- A conference on developing vocational education will be arranged, including

discussions on how to enhance the attraction of and develop on-the-job learning (workplace-based training) in vocational education in Europe.
Responsibility: NBE
Date: 1999

- A seminar for researchers on the above themes will also be arranged.
  Responsibility: NBE in cooperation with a research institute or university
  Date: Spring 1999

- The Finnish and Estonian partners will establish closer contacts with a view to discussing upper secondary education, especially parity of esteem and enhancing vocational education by networking between general upper secondary and vocational schools. The Estonian partner has been invited for a study visit in Finland.
  Responsibility: NBE
  Date: March 1999

C *Undertakings for developing upper secondary education within the SPES-NET project*

There are several projects sponsored by the NBE under way which will, where applicable, be linked with the SPES-NET project by means of reports and by acquiring information about similar projects in the other countries. The data will be put to use both in the NBE□s development work and in preparing information and arranging training for the representatives of the individual schools. For this purpose the NBE's WWW pages, to which a SPES-NET home page is linked, will be used in addition to the NBE's bulletin *Spektri*.

The SPES-NET projects include:

- Cooperation between schools and regional networking
  This project comprises training in cooperation, information dissemination, youth-level education experiments, experiences gained from them and in disseminating cooperation models.
- On-the-job learning projects (workplace-based training):
  - support for pilot activities for learning on the job, dissemination of good practices, publications, and reports;
  - the 2+1 experiments, dissemination of the experiences gained and evaluation of effects;
  - projects for developing apprenticeship training, training of on-the-job trainers etc.

Plan for a National Network in France

Anne Lazar
National Institute for Educational Research

1 A Seminar of European Training/Dissemination Activities of the SPES-NET Project

Contents:
What did we bring into the Leonardo group?

- What added value did France acquire?
- What contributions did France make and what repercussions are there for France?

Comparison with other European countries allows us:

- to reflect on the concept of parity of esteem for vocational education and training and pinpoint the position of France, which is not at all bad, with greater precision; and
- to measure diversity and to discover and respect the originality of each country.

The ideas developed in the group (parity of esteem, the various ways in which it is articulated) makes it possible to better define the position of France in the European context.

Dissemination objectives:

- to promote the European projects
- to show the interest and the role to be played by France, which both learned from the other countries and provided lessons for them; it might be possible to organise particular discussions about and working groups on specific aspects of the project.

Organising of the Seminar

- The seminar will last three days and the preliminary programme is as follows:

First day:

- Why this particular question?
- What was the origin of the Post-16 Strategies project?
- Presentation of the multiplier-effect project;
- Results: interventions in the countries represented in the project.

Second day:

- workshops for reflection, round tables (attended by national and European organisations);

Third day:
- position of France;
- Europ workshop, (Ministry of Education);
- postmortem working groups;
- prognoses.

2 Publications

1. Articles of synthesis in French resulting from the reports/tasks of the Post-16 Strategies project, for example "Comparisons of Post-16 Education Strategies to Promote Parity of Esteem Between General/Academic and Vocational Education in Europe" by Johanna Lasonen.
2. Dissemination in journals and around the trade-union power centres of French political parties and the partners of the relevant sector of French working life.
3. Dissemination to the relevant departments of the Ministry of Education:
   Office of Teaching Methods;
   Office of Valorization of Teaching Innovations;
   Office of European Coordination and International Relations;
   Committee on Educational Finance.

3 Dissemination over the Internet with a home page describing the activities of the project

4 A conference in Paris, 13-15 October 1998 Language(s) in the Workplace: a Challenge for Vocational Education and Training

The Conference was organised by L'Institut National de Recherche Pédagogique (INRP) Département de didactiques des disciplines with the participation of the Network Langage et travail of the Centre National de la Recherche Scientifique and the Conservatoire National des Arts et Métiers, Service d'enseignement, culture expression et communication.

Objectives and Themes of the Conference

The past 10 years have seen the emergence of a series of questions concerning the importance of language in the workplace, prompted by the rapid transformation of work and by new technologies, requiring us to analyse the problems that this wave of change may be creating in vocational education and training systems. Increasing demand for technical skills, the fact that writing skills have become a general requirement in the workplace, and new forms of organisation have changed the relationship between written and oral communication.

The objective of this conference is to update the links between the multidisciplinary research carried out in the *Langage et travail* network and the studies conducted in the various fields of vocational training. One of its goals is **to discuss the current developments in the use of language in the workplace and to analyse its treatment in vocational education and training.**

The conference is intended for researchers, students, teachers, managers and those in the workforce - for everyone who is concerned with language uses in the workplace

and with the importance of language in the world of vocational education and training in France and abroad.

On the basis of field analyses, there will be contributions centering around four themes:

- The curriculum preparing students for the world of work, as well as **the role of oral and written language skills in technical and vocational training** (texts, handbooks, audio-visual documents, reports, reference materials...),
- Writing and communication skills play an important part in the workplace today. **How has this been taken into consideration in teaching methods and in on-site vocational training?** What practical applications, educational tools and measures have been used?
- Training, which should reflect a consideration of the knowledge applied in all kinds of activity, calls for the use of all modes of communication. In this regard, **what problems arise when the nature and analysis of knowledge exploited in the workplace is taken into account?**
- **How can the semiotics of the workplace be established as a subject in the educational system?** In this context, which technical aspects of culture should be foregrounded?

PART IV

CONCLUSION

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Reflections on Disseminating Strategies for Reforming Post-16 Education

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1 Introduction

The present interim report is an updating description of the SPES-NET project as it stood in January 1999. The partners decided in the Jyväskylä workshop, the first meeting of the SPES-NET project in June, 1998 to prepare an interim report that would cover the development of the post-16 education strategies discussed by it and include analyses of the new partners' country reports and comments by the old partners. The new partner countries (Belgium, Denmark, Estonia, Greece, Hungary, Spain) were asked to select for discussion a reform in their own country intended to promote parity of esteem between academic/general and initial vocational education and to analyse their chosen reform strategy against the Criteria for Mapping National Strategies (Lasonen & Young, 1998, pp. 201-203, Young & Volanen, 1998).

The old partner countries (Austria, England, Finland, France, Germany, Norway, Scotland) were asked to comment on the new partners' country reports and describe, in collaboration with the new partners, what they have learnt from the new partners' reports in the light of their own previous experiences and in terms of the given reform strategy and/or strategy change. The idea was to thus start the collaboration in country pairs between the new and the old partners.

The new partners' country reports published here are outcomes of such collaboration. The interim report also includes the comments made by the old partners. The Austrian, English and Norwegian partners have analysed on a general level what the new partners' country report have taught them about post-16 education strategies. The other old partners' comments were also highly relevant and useful for the new partners in the process of revising the country reports, but too specific to be published here. The old partners were also given other options for contributing to the stage of the SPES-NET project represented by the interim report. Thus, some of the old partners (Austria, Finland and France) have described their plans for dissemination activities. In addition, some of the old partners (Finland, Norway and Scotland) have concentrated on the theme of forging links between educational establishments and enterprises, which is one of the key issues of the project.

2 Aims of the SPES-NET Project

The challenges of working life, such as the demands of flexibility, individualisation, internationalism, mobility, globalisation and lifelong learning, are reflected in changes in vocational education and its curricula. Many European countries are reforming their educational systems to meet the requirements of information society and the modern labour market.

The starting point of the Leonardo project SPES-NET has been to meet the following

1H5

demands:

- increasing the attractiveness of vocational education and training;
- forging links between educational establishments and enterprises; and
- disseminating the results of the Post-16 Strategies project and developing reform strategies.

The aim of the SPES-NET project is to disseminate the findings of the Post-16 Strategies project at both national and international level. In addition, a central aim of the current project is to improve the status of vocational education in different European countries by means of a range of reform strategies. An important challenge to dissemination activities is how to link learning in work placements to learning in educational settings.

The SPES-NET project will proceed through the following content phases:

- studying European upper secondary education reform movements and related post-16 education strategies;
- drawing up a plan and description for national dissemination activities and their intended outcomes;
- surveying reform strategies to find ways of linking school- and workplace-based learning in educational institutions and enterprises;
- defining the activities of the national networks and establishing dissemination models for assessing post-16 education strategies intended to enhance the attractiveness of vocational education; and
- publishing the results of the dissemination project in an interim and a final report, and on web sites.

3 Work of the Project

The work to be done to achieve the aims of SPES-NET comprise the following stages (Appendix 1):

1. In the first stage the new partner countries (Belgium, Denmark, Estonia, Greece, Hungary and Spain) have familiarised themselves with the reform strategies of the old partners and analysed vocational education and training in their own countries that is related to the four strategies. The old partner countries have been asked to comment on the new partners' country reports and describe, in collaboration with the new partners, what they have learnt from the new partners' reports in the light of their own previous experiences from the given reform strategy. The idea was to thus start the collaboration in country pairs between the new and the old partners together with the process of mutual learning.
2. After completing this stage the project has gone on to disseminate information about developmental strategies at national and international level by means of working groups, the Internet and various publications, and to analyse national- and international-level links between education and working life.
3. In the final seminar the participating countries will assess the success and results of the multiplier-effect project, and the results will then be collected in a final report.

One factor in the work of the project is the diversity of the partners: there are old partners, new partners and new partners in the old partner countries. There are six new partners. The extension of the partnership has been mainly directed to the eastern and southern parts of Europe. The partners represent different institutions: university departments, research institutes, teacher training establishments, vocational further education institutions and administrative bodies.

Table 1
Descriptive Features of the Partner Countries.

Partner country	*Partner institution*	*Partner status*
Austria	University: Dept of Technology	Old partner
Belgium	Research institute (non-university)	New partner
Denmark	Teacher training establishment	New partner
Estonia	Administrative body	New partner, 'associated partner'
Finland	Administrative body	Old partner country, but new institution
France	Research institute (non-university)	Old partner
Germany	University: Dept of Technology	Old partner
Greece	University: Dept of Sociology	New partner
Hungary	University: Dept of Technology	New partner
Norway	Teacher training establishment	Old partner
Spain	University: Dept of Education	New partner
United Kingdom * England * Scotland	 University: Research institute Further vocational training establishment	 Old partner Old partner country, but new institution

As regards the context and status of vocational education and training, each country is in a very different situation:

- The level of industrialisation is highly variable (e.g. England, Germany, Finland, Greece, Estonia).
- The unemployment rate varies very much between the partner countries (in 1998 from 4% to 19%).

- The degree of attraction exerted by vocational education and training varies from one country to another.
- Vocational education and training provision may be school- or work-based.
- The particular history of vocational education and training in each country influences present-day development.
- There are partner countries (such as Estonia and Hungary) which are undergoing sweeping structural and political changes and reconstructing their vocational education.

Table 2
Transition from Education to Working Life.

Partner Country	*15-24 year olds in education/ training in 1995 (%)*	*15-24 year olds not in education/ training and non-active in 1995 (%)*	*15-24 year olds active, with a job in 1995 (%)*	*15-24 year olds active, seeking a job in 1995 (%)*
Austria	53	3	42	3
Belgium	65	4	25	7
Denmark	68	3	26	3
Estonia	-	-	-	-
Finland	57	6	19	9
France	67	4	21	9
Germany	62	5	29	4
Greece	56	9	25	9
Hungary	-	-	-	-
Norway	-	-	-	-
Spain	44	8	39	9
United Kingdom	46	8	39	8

(Source: Youth in the European Union. From education to working life 1997, 19.)

4 Reflections on Post-16 Education Strategies

The Post-16 Strategies project identified four post-16 education strategies *(vocational enhancement, mutual enrichment, linkages and unification)* and a number of school reform schemes linked with them (Lasonen, 1996; Lasonen & Young, 1998). The SPES-NET project will continue the analysis of these reform strategies. The four strategies will be considered in relation to the new countries' reforms at the same time as the old countries' reforms will be reanalysed. The question to be addressed by the SPES-NET project is whether the four post-16 education strategies are still relevant to the new and old partners.

Implicitly and explicitly, the aim of an educational system is to preserve national

culture. Thus, despite perceptions of a globalising trend, the goal is not to develop a single European vocational education system.

- It is important to look at future cultural trends and social changes and try to take these factors into account in the project.
- The historical point of view should also be taken seriously. The historical context of each country has to be understood in order to make sense of its present system.
- Further, more attention must be paid to the question of pedagogy and to the content of education. Educational content must relate to working life.
- One aspect which has remained untouched in the discussion about the four strategies is that of organisational and institutional considerations.
- Equality of access or equality of outcome has over the years been one of the key themes in the development of education and training. The questions involved in making use of the opportunity to choose between different options and the importance of career counselling are related to equality
- The recent trends in labour markets reveal changes in the world of work: the polarisation of the labour markets and the disappearance of the middle classes. Given these developments, it is very important to achieve parity of esteem for vocational education.
- Further, lack of esteem emerges as a shared feature of vocational education and training in various parts of Europe.

Table 3
A summary of the Four Post-16 Education Strategies in the Partner Countries.

Country	*Vocational enhancement*	*Mutual enrichment*	*Linkages*	*Unification*
Central Europe	Austria, Germany		France	
Southern Europe	Spain*			
Great Britain			England	Scotland
Nordic countries	Denmark*	Finland, Norway		Sweden
Eastern Europe				

* = new partner
? = new partner, strategy not specified: Belgium, Greece, Estonia, Hungary

The new partners' country reports indicated that it is not easy to classify the new partners' systems in terms of the four post-16 education strategies. Such an analysis of post-16 education strategies is particularly difficult in those countries which are undergoing structural and political changes, such as Estonia and Hungary, and in countries where, as is the case in Estonia and Greece, vocational secondary education is not well developed. As a result, young people enter tertiary education in order to obtain credentials valuable on

the labour market.

Even when a new partner country's reform could be classified as representing a strategy that had already been identified in an old partner country, there could be differences. For example, Danish vocational education represents the dual system and the strategy of vocational enhancement, but differs, nevertheless, from the German dual system. In addition, the old partners' reanalysis of the four post-16 strategies sometimes revealed that a reform previously identified by the Post-16 Strategies project as representing a particular strategy must on closer inspection be considered to manifest another strategy, as has been the case in Norway. The Norwegian educational reform is more closely related to the strategy of vocational enhancement than to that of mutual enrichment, the original classification.

A successful analysis of post-16 education strategies seems also to require that a few years have passed since the given educational reform, making it possible to evaluate it. Further, one reason for the difficulties encountered in classifying the new partners' strategies is that no clear distinction has been made between the described reforms or experiments and the features of the educational system as a whole. Separate analyses of the educational reform strategy chosen by a partner country with a view to improving parity of esteem (vocational enhancement, mutual enrichment, linkages and unification) and of the structural organisation of its educational system (tracked or unified) could help us to better identify the differences and similarities between the partner countries, as well as to find indicators and tools for developing reform strategies (Cf. Birke & Spours, 1996; Raffe, 1996).

5 Dissemination Activities: Horizontal and Vertical Networking

One main aim of the SPES-NET project is to disseminate the post-16 education strategies identified by the Post-16 Strategies project at the vertical (national) and the horizontal (international) level. The results of the project may be spread in many different ways. The SPES-NET project intends to use modern electronic media to disseminate information and create networks between experts in vocational education.

Horizontal networking:

- international workshops (dissemination across the partnership);
- cooperation within the partnership (study visits);
- creating a website for the project;
- international conferences on VET and VET research;
- cooperation with EU organisations (CEDEFOP, National Leonardo Centres); and
- cooperation with other projects (e.g. the Leonardo project DUOQUAL, other possible projects)

The Jyväskylä workshop in1998 discussed cooperation between the two Leonardo projects SPES-NET and DUOQUAL. It was suggested that cooperation should continue, especially between the coordinators. The aim is to increase our understanding of the current situation in education and training and in the world of work, to predict developmental trends in VET and to achieve a more interactive and personal cooperation within and between the two partnerships.

At a concrete level, the following suggestions for practical cooperation were made:

- The SPES-NET project might publish something in collaboration with DUOQUAL and CEDEFOP.
- The SPES-NET and DUOQUAL projects have partners in the same countries, so that it would be possible for them to co-operate at national level.
- The joint workshop in Flensburg to be held in October 1999 will provide a forum for shared learning from the results of the two projects. The joint workshop may create a base for future networks, and may help to generate long-term collaboration between countries and to develop methods for producing the multiplier effects and impacts aimed at by both dissemination projects.

Vertical Networking: Partners' Activities:

The partners' plans for dissemination activities at the vertical level seemed to vary very much depending on the partner country and its resources for national networking, as well as on the institutions which the partners represent. Those partners who come from administrative institutions are more able to construct networks as compared to those who represent universities. Thus dissemination is a highly country-specific process.

An important challenge to dissemination activities is the question of how to link learning in work placement to learning in educational settings. It seemed that there are partners who are willing to engage in cooperation between schools and working life. In their papers the Finnish and Norwegian partners have described plans for improving links between educational establishments and enterprises.

Finnish vocational education has been highly school-based, but since 1999 the three-year studies of every vocational student include a six-month practical training period. The trend in Finland as well as in England is towards giving students a wider range of options. They may now take courses offered in schools other than their own. The new legislation in Finland requires schools to collaborate. Both in Finland and England, there has been a general move from a centralised system towards a devolution of decision-making powers.

By contrast, Norway has a highly centralised educational system. The Norwegian Reform -94 gave the students a statutory right to three years of upper secondary education, including apprenticeship training, which is an important part of upper secondary education in Norway. The problem is that there is little or no formal organised local-level contact between training enterprises and schools. As a result, there is no contact or cooperation between schools and workplaces. The challenge is to bring the teachers in the schools and the inspectors in the enterprises together.

In Germany the situation differs from that of the other partners, since the existing system is based on strong links between schools and enterprises. Originally, since the early Middle Ages, vocational training involved a master craftsman teaching his apprentice. Cooperation between enterprises and vocational education has a long tradition in Germany. The responsibility for vocational training provided outside the schools, and in particular in enterprises, rests with the Federal government. There are some experiments in vocational training, for example the idea of a learning-site consortium: several small enterprises and one big enterprise and a vocational school organise VET together. The VET institution bears the main responsibility. Trade unions are also involved in planning VET. Thus the idea is to proceed from the bottom up, from local initiatives to more large-scale undertakings.

In Austria, by contrast, the problem has been how to create connections between schools and enterprises. Usually cooperation has been initiated by schools. The Austrian partners will interview political decision-makers about what kind of resources can be provided for cooperation between schools and enterprises. In addition, information exchange over the Internet, publications, press releases, press conferences and national workshops seem to be one of the main themes in the Austrian partners' dissemination activities.

The Scottish partner institution has described its links with working life. The college works closely with enterprises, identifying needs and responding to demand. It plays an active role in supporting development in local schools and local businesses. The French partner has presented a plan for dissemination activities which concentrate on organising seminars and information exchange by means of publications and the Internet. The French partner works towards parity of esteem between vocational and academic education especially by organising a conference on the current developments in the use of language in the workplace and on analysing its treatment in vocational education and training.

6 Conclusion

The function of education is on the one hand to produce labour to fulfill the needs of industrial life, on the other hand to serve as a central source of equality and justice. The function of vocational education is to deliver qualifications and prepare individuals to serve in jobs that are differentiated both horizontally and vertically. Vocational education must simultaneously ensure educational equality and produce difference. These functions are mutually conflicting because production presupposes differently qualified labour while the ideology of equality demands equal opportunities for upward social mobility through education (Stenström, 1997).

In other words, equalising opportunities requires that students are taught similar curricula. By contrast, the preparation of young people for the differentiated labour market requires differentiation of educational experience. The dilemma stems from the fact that the differentiation of curricula by type of skill requires tracking. Therefore, vocational training and tracking are closely related phenomena. One of the challenges facing the SPES-NET project is finding out how to link these phenomena. (Cf. Shavit & Müller, 1998)

This interim report was characterised above as an updating description of the work of the project. The focus of the project's further work will be promoting vocational education and training in the partner countries, considered from the point of view both of reform strategies and of improving links with working life. The link between academic/general and vocational education will not be forgotten either. Thus two themes will guide the further work of the project: 1) some partners will concentrate on developing and disseminating reform strategies, while 2) others will focus on improving the links between education and working life. The focus of the reform strategies is promoting vocational education and training in the partner countries. In this connection it is important to make a further analysis of vocational enhancement, not only as a strategy but as a general view of vocational education because it seems that there is not just a single way to enhance vocational education.

The challenge, in the final stage of project work, is reassessing the strategies and classifying the educational systems of the partner countries, systems that represent different parts of Europe and stem from different processes of political and educational history. Will

it be possible to detect common features despite the differences between the countries or in the dilemmas involved in the tasks of vocational education? The aim of the SPES-NET project is to make a summary of the current trends in European education and to elaborate the results on an abstract level.

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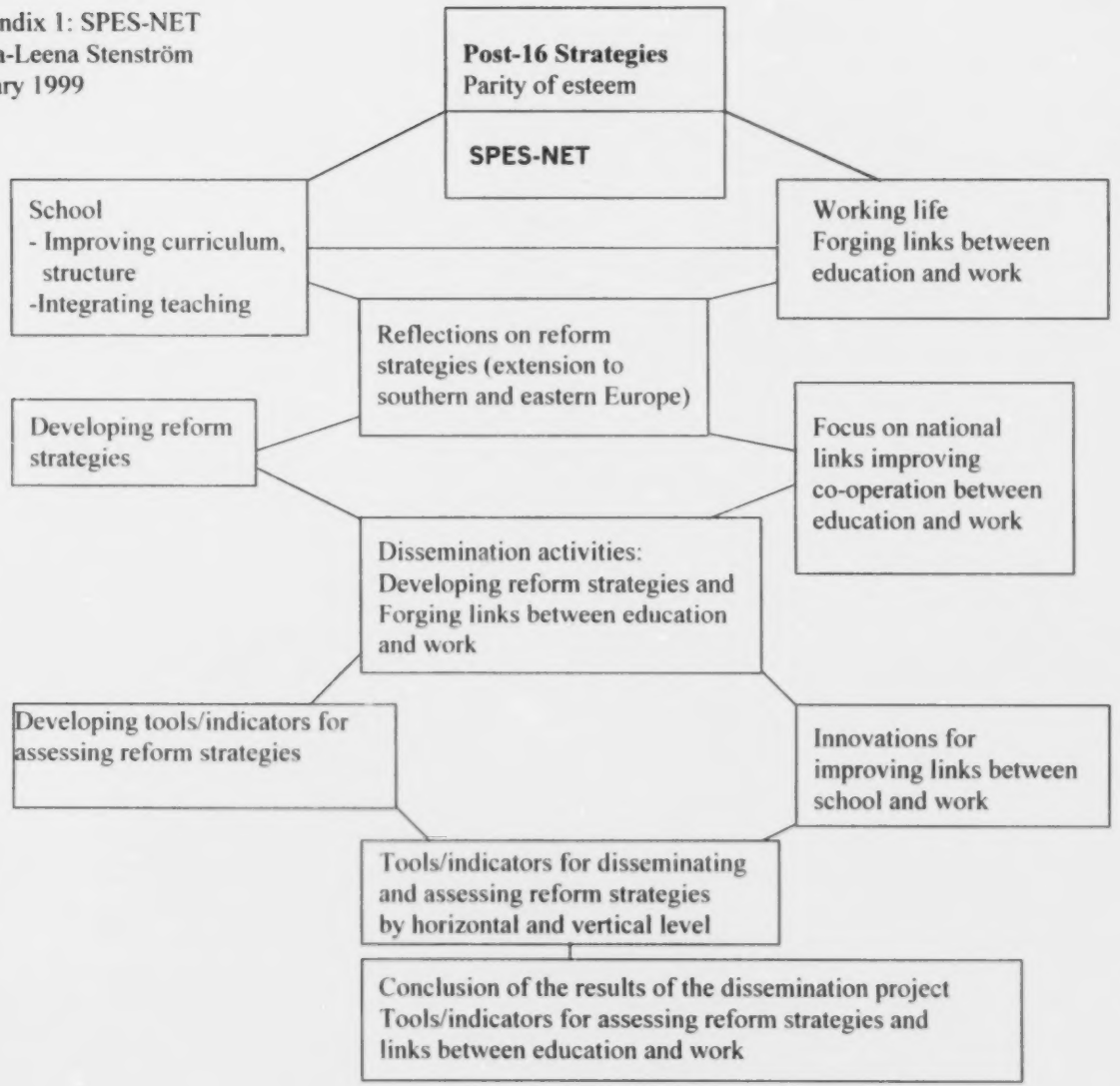
Appendix 1: SPES-NET
Marja-Leena Stenström
January 1999


Post-16 Strategies
Parity of esteem
SPES-NET
School
- Improving curriculum, structure
-Integrating teaching
Working life
Forging links between education and work
Reflections on reform strategies (extension to southern and eastern Europe)
Developing reform strategies
Focus on national links improving co-operation between education and work
Dissemination activities: Developing reform strategies and Forging links between education and work
Developing tools/indicators for assessing reform strategies
Innovations for improving links between school and work
Tools/indicators for disseminating and assessing reform strategies by horizontal and vertical level
Conclusion of the results of the dissemination project Tools/indicators for assessing reform strategies and links between education and work

Dissemination activities

Jyväskylä workshop 6.-10.6.1999
Dissemination by horizontal networking

Vertical networking

Valencia workshop 23.-26.1.1999
Interim report
Horizontal networking

Vertical (national) networking

Flensburg workshop in October, 1999
Horizontal networking

Final report

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